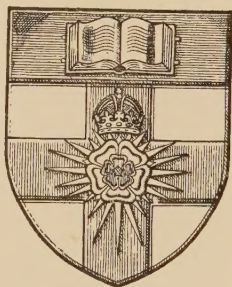
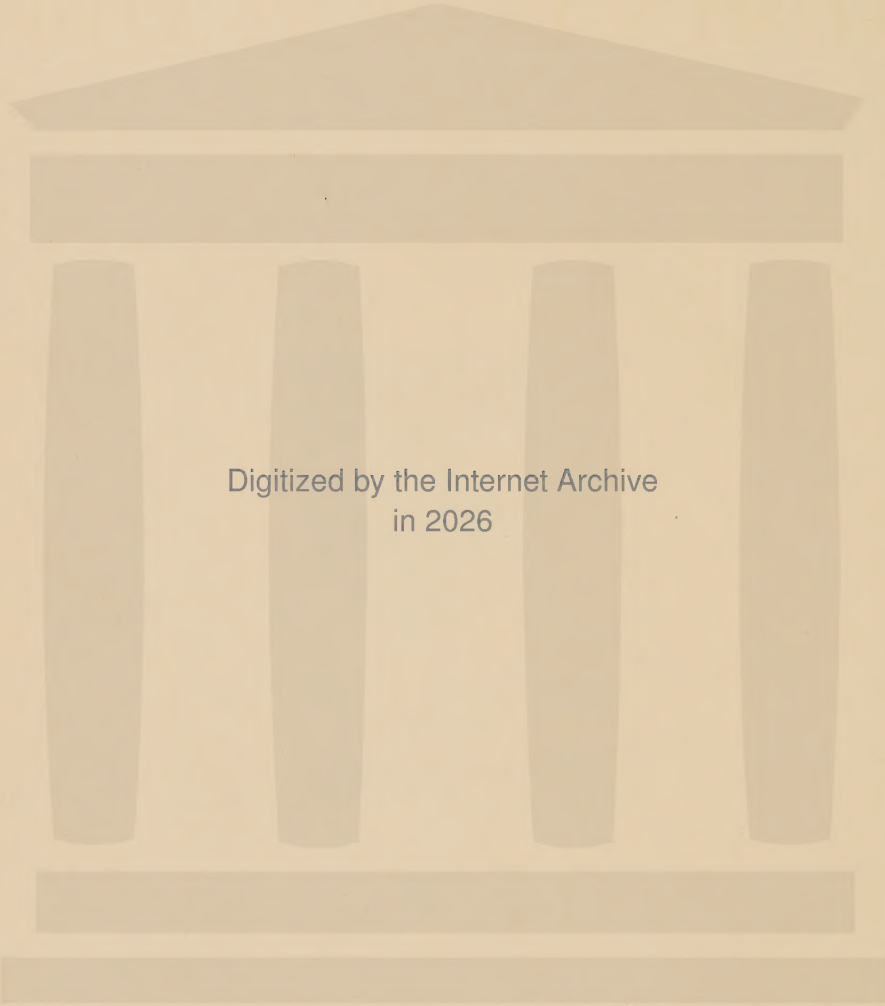


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THE ANNUAL
OF THE
BRITISH SCHOOL AT ATHENS

No. 51

1956

THE BRITISH SCHOOL AT ATHENS

50 BEDFORD SQUARE, LONDON, W.C.1

Published by the Managing Committee

PRICE: THREE GUINEAS NET

THE BRITISH SCHOOL OF ARCHAEOLOGY AT ATHENS

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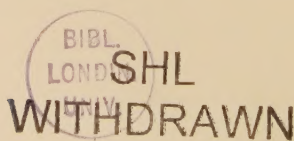


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THE COURTS OF JUSTICE IN ARCHAIC CHIOS

43. Stele, Mus. Istanbul 1907.

NOTES ON SOME ATTIC DECREES

(Continued)

III

E. Schweigert, *Hesperia* vii (1938) 280 f., no. 14.

IN this much-mutilated fragment from near the top of a decree, which S. dates to the period 370–360 B.C. on the evidence of the lettering, only five letters survive from the text proper, in (apparently) line 7, namely λεφθη, for which no restoration is offered. For these it seems impossible to find any alternative to [ἐκ]λέφθη or -θη[σαν, and it may be suggested that this allusion to a theft, important enough to be recorded in a decree, might well be a sequel to the theft of sacred objects from the Parthenon by Glauketes. We know from Demosthenes¹ that this crime was committed while he was a Treasurer (of Athena), and we also have his name recorded as Secretary to that board in the incomplete heading of the *Traditio* of 374/3 B.C.² It is possible, therefore, that this decree recorded a resolution that he should be prosecuted on this charge, and, if so, that it was passed either in his year of office or in the following year. As, however, we see in line 2 that the decree is dated to the tenth prytany, it seems unlikely that a whole year would have been allowed to elapse before taking this decision, and I would suggest that this decree should be dated to the last prytany of 374/3. As we do not know the name of the Secretary for this year we cannot restore line 2 or calculate the number of letters required for the prytanizing tribe in line 1, and our restoration must be left vague on these points, but clearly it points to a *minimum* line-length of thirty-nine letters and a *maximum* of forty-three.

	[Ἐπὶ Σωκρατίδῳ ἄρχοντος ἐπὶ τῆς -- ἰδὸς δ]
	[εἰ]κάτης [πρυτανείας ἥ1 - - - - - ἐ]
	[γ]ραμμάτε[υεν, - - - - - ἐ]
	[π]ῆστ[ά]τ[ει, - - - - - εἶπεν - - - - -]
5	(defaced) - - - - -]
6	(defaced) - - - - - ἐκ]
	λέφθη[σαν (?) - - - - -]

IV

Op. cit. 289 f., no. 17.

S. here adds a new fragment which joins on the left the substantial portion of a decree found and published by Broneer (*Hesp.* ii (1933) 395 f. = EM 12719) and gives us the beginnings of lines 13–20. In addition to the almost complete erasure of line 7 it should be noted that the surface of the stone was damaged in places before it was engraved, and that owing to the presence of flaws the first space in line 6 and the second in line 9 were left blank. S., however, mistakenly indicates that in each case a superfluous *omikron* was inserted by the engraver, and reads δεδό[{}]χθαι and πν[{}]ρά[{}]ττων, for which we should read δεδό[{}]χθαι and πν[{}]ράττων respectively.

¹ xxiv. 12–13; *PA* 2946.

² *IG* ii.² 1421; in his original publication of this stone (*AJA* xviii (1914) 1–17) A. C. Johnson mistakenly restored the heading so as to date the Secretaryship of Glauketes

to 371/70 B.C.; the correct restoration, giving his date as 374/3, was published by Kolbe, *Philologus* xxxviii (1928) 263; cf. *IG* ii.² pt. ii, *Add.* p. 799.

Unfortunately he has also omitted a line after line 15, which the photograph enables us to read as ΑΙΕΙΣΤΟΕΝ⁷ and in any case his incomplete restoration of the five preceding lines is unconvincing. He reads them as

τοῖς ἐν Βυ]

10 ζαντίωι πο[λιορκουμένοις καὶ ποεῖ τὰ]
 συνφέροντ[α τῶι δῆμωι(?) . . . 7 . . . κοινῇι]
 καὶ ἰδί(αι) ᾿Αθη[ναίων 16 ε]
 ἰς ᾿Ελλάσπο[ντον 18]
 το καὶ ὑπὲρ ᾿Ελ[λήνων 14 δ]
 ιετέλει, κτλ.

for which I would suggest after line 10,

συνφέροντ[α τῶι τε δῆμωι τῶν ᾿Αθηναίων]
 καὶ ἰδί(αι) ᾿Αθη[ναίων τοῖς εἰσπλέουσιν ε]
 ἰς ᾿Ελλάσπο[ντον, κτλ.

For the remaining eighteen letters in line 13 we seem clearly to require the third person singular of a verb in the middle or passive to account for το at the start of line 14, and presumably in the imperfect, in view of δ]ιετελεί in the next line. The general sense here appears to be that the benefactor honoured in this decree is now giving to Athenian ships entering the Hellespont the same assistance that he had previously given to those of all other Greek cities, for we may regard the insertion of ἀπάντων after ᾿Ελλήνων as reasonably certain; and, to complete the line, εὔ ποιῶν δ]ιετελεί seems clearly indicated. For the verb ending in -το we must rule out ἐποιεῖ]το as both being repetitive and involving an unlikely change of voice from ποιῶν, and I would suggest ἐφιλοτιμεῖ]το, leaving us with room for eight letters after ᾿Ελλάσπο[ντον, for which ἄπερ πρίν seem possible, the pronoun agreeing with τὰ συνφέροντα in line 11.

In lines 15-17 the omitted line αὶ εἰς τὸ ἐντ obviously begins with the last two letters of the verb governed by the preceding ὅπως, and in line 16 (actually 17) οἱ . . . εον must surely be completed as οἱ [πλ]έον[τες. If we complete -αι as ἀφικῶνται the space after διετέλει can be convincingly filled with (δ)πω[ς ὡς ἀσφαλέστατα, and as εἰς τὸ ἐντ- obviously refers to a destination we may suggest εἰς τὸ ἐντ[αῦθα ἐμπόριον οἱ ἔμποροι] | οἱ [πλ]έον[τες (e.g.) ἐν ξέναις ναυσὶν εἰς ᾿Ελλά]σπο[ντον. The restoration proposed for these lines will therefore run as follows:

- - τοῖς ἐν Βυ]

10 ζαντίωι πο[λιορκουμένοις καὶ ποεῖ τὰ]
 συνφέροντ[α τῶι τε δῆμωι τῶν ᾿Αθηναίων]
 καὶ ἰδί(αι) ᾿Αθη[ναίων τοῖς εἰσπλέουσιν ε]
 ἰς ᾿Ελλάσπο[ντον ἄπερ πρίν(?) ἐφιλοτιμεῖ]
 το καὶ ὑπὲρ ᾿Ελ[λήνων ἀπάντων εὔ ποιῶν δ]
 15 ιετέλει (δ)πω[ς ὡς ἀσφαλέστατα ἀφικῶντ]
 αὶ εἰς τὸ ἐντ[αῦθα ἐμπόριον οἱ ἔμποροι]
 οἱ [πλ]έον[τες ἐν ξέναις ναυσὶν εἰς ᾿Ελλά]
 σπο[ντον, κτλ.

V

Op. cit. 291 f., no. 18; *AJP* lxi (1940) 358; cf. Tod, 'Progress of Gk. Epigr.', *JHS* lxii (1942) 65.

In his original publication of this text, which he correctly dated to 339/8 B.C., S. overlooked the fact that Kirchner had already identified the Secretary for this year as Phaidros (*AM* li

(1926) 157 f.), and he published the necessary correction in *AJP* (loc. cit.) and restored the demotic in Kirchner's inscription as Χολλείδης. We still lack certainty as to this man's patronymic, for which S. reads -ωνος followed by Χ[ο]λλ[ε]ί and indicates that approximately twelve letters are missing which covered the name of the Secretary and the first part of his patronymic. Now that Φαῖδρος is certain we have 5(±) letters left for the latter. As the photograph shows, the letter before the *omega* can have only been Δ or Λ, preceded, apparently, by a vertical stroke, and it is tempting to complete the name as [Με]ιδῶνος (with four letters instead of five in the gap) and to recognize Phaidros as a brother of Ἀρκεφῶν Χολλείδης who is known from a list of Bouleutai for 335/4 B.C. (*IG* ii.² 700. 97 and 2382. 17; cf. *PA* 2227).

In lines 5-6, where S. reads περὶ ὧν λέγει Θ. . . αἰνος, for this improbable name I should prefer to substitute Θ. . . ημος, adding that Θ[εόφ]ημος is perhaps preferable, as being a less rare name than Θ[εόδ]ημος, but that Θ[οῦδ]ημος is another possible alternative.¹

VI

Op. cit. 294 ff., no. 20.

It seems impossible to arrive at a full restoration of this interesting document relating to the establishment of a festival,² but thanks to S.'s excellent photograph we may recognize two clues which give us an indication of the original width of the stele and of the presumable length of the lines. The first of these is the position of the *omikron*, sole surviving letter of the word θεοί engraved on the *fascia* of the moulding above the text, which is separated from the right-hand edge of the stele by the space occupied by twenty letters in the text below (c. 0.175 m.); and we may assume that the *epsilon* was set at approximately a similar distance from the left-hand edge. This would give us c. 0.35 m. as the width of the stele, *plus* the unknown interval between the E and the O. As the final *iota* has been lost through surface-injury we cannot calculate from its position the space between it and the *omikron*, but it is in any case unlikely that it was placed at the extreme edge of the stone, and we may reasonably assume that the space between these two letters would fall within the limits of twelve and eighteen letters of the text proper (say 0.105-0.157 m.), implying a line-length of between fifty-two and fifty-eight letters.

The other clue is to be found in the spacing of the larger letters in line 2 (H. 0.009 m.) which read - - - ἔγραμμάτευν, for five of them occupy the space of nine letters in the body of the text; and assuming that this proportion holds good for the missing left-hand half of the stele we might expect to have an exact multiple of nine letters in the text and five in the heading, and our requirements would be met by restoring lines of fifty-four and thirty letters respectively, giving us in line 2 eighteen letters ending with *sigma* for the name and demotic of the Secretary.

Before offering any suggestion for the restoration of his name, we must consider the date of the decree, which will depend on the interpretation of the words τ]ήν στήλην τήν περὶ τῆς εἰρ[ήνης in lines 3-4. Schweigert suggested for the date a year shortly after the treaty of peace with Philip II of Macedon, 338/7 B.C. (*IG* ii.² 236; Tod, *GHI* ii. 177), drawing attention to the 'early Lycurgan' lettering, for which he compared *IG* ii.² 333 and 334. P. Roussel, however, interpreted the εἰρήνη as that between Athens and Sparta in 374 B.C.,³ and would date the document soon after that year, pointing to the appearance of the name of the Secretary in line 2 as an example of a practice which did not survive into the second half of the fourth century. But this is so clearly an exceptional text, in which the usual formulae introducing

¹ For Theophemos, cf. *PA* 7091-8; for Theodemos, *ibid.* 6746 (only); for Thoudemos, *ibid.* 7247-8.

² It is much to be hoped that Professor Louis Robert will in due course shed further light on this text. Having seen the note in which he stated his intention of returning

to it (*Ét. épigr. et philol.*, p. 62, 6), I ascertained that he had no objection to my publishing these notes on the subject, and I wish to record my warm appreciation of his approval.

³ *RA* xviii (1941) 215 f.

a decree are not present, that his argument carries no conviction, and I have no doubt that Schweigert's dating is correct. In support of his view we may add that the lettering of the text of the treaty with Philip (*IG* ii.² 236) also definitely resembles that of our decree, and that the rounded bevel of the right-hand edge of the stele is a feature which Wilhelm long ago recognized as typical of some Lycurgan documents.¹

If our calculation of eighteen letters for the name and demotic of the Secretary is correct, in the ten years following the Peace of 338/7 the only ones with which this figure agrees are 334/3 (*Μνησίφιλος*⁸ . . .), 330/29 (*Ἀντίδωρος Παιανιεύς*), and 328/7 (*Πυθόδηλος*⁹ . . .). For our choice, if we can make one, between these alternatives we must look more closely at the contents of the decree. In lines 4–5 we have mention of the institution (?) of chariot-races for quadrigae and of a musical contest 'every third year', and in line 6 the sum of five talents is voted, presumably towards the cost of the games in general; these arrangements, together with the proclamation of *ἐκεχειρία* (line 9), indicate a festival of international status. The introduction of a chariot-race at this period cannot be a reference to the Great Panathenaea, but the natural alternative choice, namely the Eleusinia, has much in its favour. There are, in fact, two independent pieces of evidence concerning these games, with which our new text would fit convincingly.

The first of these is the closing passage of Aristotle's *Ἀθ. Πολ.* 54, 7, where we are told that the Eleusinia were the fourth and the Panathenaea the fifth of the 'penteteric' games, and after the word *Παναθήναια* comes an obscure passage, ending, apparently, with mention of the addition of the Hephaestia (as a sixth penteteric festival) in the archonship of Kephisophon (329/8 B.C.).²

Our second piece of evidence is to be found in the accounts of the Eleusinian sanctuary for the same year (*IG* ii.² 1672. 258–61), which it will be helpful to quote in full:

ε(ἰς) τὴν τριετηρίδα τῶν Ἐλευσινίων εἰς τὸν γυμνικὸν ἀγῶνα καὶ τῇ[ς ἵπποδρομίας] | καὶ τοῦ πατρίου ἀγῶνος καὶ τῆς μουσικῆς μέδιμνοι ϞΔΔ· εἰς τὴν πεντετηρίδα τ[ῶν Ἐλ]ε[υσινίων εἰς] | τὸν γυμνικὸν ἀγῶνα καὶ τῆς μουσικῆς καὶ τῆς ἵπποδρομίας(ς) καὶ τοῦ πατρίου μέδιμνοι^α. 8. . . . | εἰς τὴν ἵπποδρομίαν τὴν προστεθεῖσαν κατὰ ψήφισμα ἄθλα μέδιμνοι ϞΔΔ· σύμπαν κεφάλαι[ι ἱερεῦσι] | καὶ ἱερείαις εἰς τὴν τριετηρίδα τῶν Ἐλευσινίων καὶ εἰς τὴν πεντετηρίδα μέδιμ[ν]ο[ι] | ΗΗΗΗ. . . .|. ³

The mention of a newly-introduced type of chariot-race and of a 'trieteric' musical contest coincides so closely with the terms of our decree that we may reasonably conclude that the latter does in fact refer to the Eleusinia.

There is, however, one difficulty to be faced: the name of the Secretary for 329/8, together with his demotic (*Σωστράτιδης Εὐπυρίδης*), contains twenty and not eighteen letters. In this dilemma we might suppose either that the letters in the missing left-hand portion of the decree were more closely spaced in line 2 than my reckoning indicated (possibly owing to the presence

¹ *Attische Urkunden* i (1911) 8 f.

² In the Budé edition (edd. Mathieu and Haussoullier) we have καὶ τούτων οὐδεμία ἐν τῷ αὐτῷ ἐγγίγνε[ται]. Νῦν] δὲ πρόσκειται [καὶ Ἡ]φαίσ[τια] ἐπὶ Κηφισοφώντος ἀρχοντος, whilst Blass⁴ (Teubner, 1903) had suggested τούτων οὐδεμίᾳ ἐν τῷ αὐτῷ ἐν[ισαυτῷ] γίγνε[ται]. Ἐκτῇ] δὲ πρόσκειται, κτλ. Neither reading leaves any doubt that penteteric games were in existence in Eleusis before the archonship of Kephisophon (329/8 B.C.).

³ The number of vacant spaces after μέδιμνοι at the end of line 260, shown by Kirchner as eight, cannot be right, since the total in line 262, namely ΗΗΗΗ. . . ., is made up of four payments, as follows: 244 medimnoi, given κατὰ τὰ

πάτρια to the priests and priestesses over the past four years (lines 255–8), plus two payments of 70 medimnoi each, to which is to be added the amount shown as occupying eight spaces; but assuming that the total of 400 plus four symbols (for which there are sixteen choices available between 404 and 480 inclusive) is correct, there is no sum of eight symbols which, added to 384, will give a total of ΗΗΗΗ. . . . If we reduce the eight vacant spaces to seven, we find that there are seven alternative amounts, of which the most likely in this context would be either 69, 78, 87, or 96, which when added to 384 would give us either 453 or 462 or 471 or 480, in each case exactly filling the eight spaces in line 262.

of two *iotas*); or, conceivably, that the ψήφισμα concerning the additional chariot-race was in fact passed in 330/29 B.C. when Ἀντίδωρος Παιανιεύς was Secretary, but that the games in question were held in the following year, as the inscription from Eleusis indicates.

In the circumstances, any attempt at a full restoration would be dangerously speculative, but a few suggestions may be offered: for the first two lines of the decree, [δεδοχθαι τῶι δῆμῳ ἀναγράψασθαι παρὰ τὴν στήλην τὴν περὶ τῆς εἰρ[ήνης θείναι ἵπποδρομίαν ὑπὲρ ἄρματα τέθριππα, ποεῖν δὲ καὶ ἀγῶνα, but whether the next line contained the title of another contest or some explanatory words connecting ἀγῶνα with μουσικόν is not clear. In a few other passages it seems possible to improve on Schweigert's text, as follows: in line 7 (numbered 6 by S., who does not allot a number to [Θε]ο[ί] in line 1) for his ἐν τῶι ἐνιαυτῶι ἐν ᾧ Ἄντα --- we should surely read ἐν ᾧ ἂν τὰ [Παναθηναία τὰ μέγала ἀγῶσιν (or possibly τὰ [Ἐλευσίνια τὰ πεντετηρικὰ(?)), in any case giving the instruction that the new chariot-race was to be an addition to the 'penteteric' games.

In line 8, where S. reads τιθέν[αι] δὲ τὴν πανήγυριν περ[ι]---, τιθέναι would seem to be an awkward repetition after the use of the same verb in lines 6-7, and there may well be a transition here to the instructions for announcing the festival, followed as they are by the resolution about proclaiming a truce in the next line. A likely restoration for περ- at the end of the line would be περ[ι] ἅπασαν τὴν Ἑλλάδα, but I cannot fill the following gap, or link these words with -πύλας, which, I would suggest, may refer to Thermopylae as a limit of the territory to be covered by the heralds announcing the festival.¹ In line 10 ἐκεχειρίαν τοῖς ἀφικνουμέν[οι]ς again involves an awkward repetition of the same noun from the previous line, and it would be preferable to substitute -- ἀσφάλειαν, but here too I have no suggestion for filling the gap after the verb (ἐπαγγεῖλαι?) which we require at the beginning of the line. For the conjunction of the words ἐκεχειρία and ἀσφάλεια in reference to a festival we may compare IG vii. 4135, concerning the Boeotian festival of the Ptoia, where we read in lines 9-11 τῆς δὲ || ἐκεχειρίας καὶ τῆς ἀσφαλείας ἄρχειν τὴν πεντεκαιδεκάτην τοῦ Ἱπποδρομίου μηνός, κτλ.

In line 12, where S. has no explanation to offer for -- -ι δεκαμενίου, we may surely assume an error on the part of the engraver, who was responsible for the omission of the cross-bar from more than one *alpha*, and of the dot from the *theta* at the end of line 6, and read -- -ι δέκα μὲν (τ)οῦ, and see in this figure a reference to the appointment of officials as organizers of the festival(s). It is not easy to decide whether the use of μὲν after δέκα implies a distinction between 'trieteric' and 'penteteric' games or between the new chariot-race and the other contests in the festival, but in any case we may conjecture for this passage κληρῶσαι δὲ ἀθλοθέτας εἴκοσι δέκα μὲν (τ)οῦ [τριετηρικοῦ(?) δέκα δὲ τοῦ πεντετηρικοῦ(?) ἀγῶνος (or, alternatively, (τ)οῦ [ἵππικ]οῦ δέκα δὲ τοῦ γυμνικοῦ, or τοῦ μουσικοῦ(?)). As we have Aristotle's authority for the expression κληρῶσαι ἀθλοθέτας, to the number of ten, for the Panathenaic festival,² the former alternative seems distinctly preferable.

In line 13, the few letters damaged by the fracture of the stone, which S. reads as ινι...ελ, appear from the photograph to read as ινπ...ταυ, perhaps indicating -- σ]ιν π[αρά] ταῦ[τα](?).

VII

Op. cit. 297 f., no. 22.

It seems obvious that the letters --- ορο[s] at the head of this honorary decree belong to the genitive of a name, presumably ending in -νωρ. S. indicates that five letters are missing, but on the evidence of his photograph it seems at least equally likely that there were only four,

¹ Cf. Wilhelm's discussion of such expressions as οἱ μέχρι Θερμοπυλῶν Ἕλληνες (Thuc. ii. 101, 2) in *Att. Urk.* i. 10-11.

² Ἀθ. Πολ. 60, 1.

suggesting a name such as Βιάνωρ, Εὐάνωρ, or Θεάνωρ, which would satisfactorily fill the gap of six spaces available for the name, in the nominative, of the first of the three men to be honoured in line 16.

VIII

Op. cit. 300 f., no. 24 (a new fragment added by S. to *IG* ii.² 433).

In line 4 of the new fragment (*a*) we may safely restore -- τ[.]ια καί --- as κατὰ τὰ π[ά]τ[ρ]ια καί ---, and infer that the Thesmothetai are here being commended for their due performance of the religious duties (including sacrifices?) required by their office, since κατὰ τὰ πάτρια is almost invariably used in a religious context.¹

In line 8 (= *b*, line 4) it is clear that the person here honoured must be the Secretary of the Thesmothetai, who are honoured with a gold crown (each?) in the preceding lines. For his duties and his importance we have the testimony of Aristotle (²Αθ. Πολ. 59, 7; 63, 2). In view of Schweigert's indication (based on line 10 only, for which his restoration [ἀν]αγράφαι δὲ τόδε τὸ ψήφισμα τὸν γραμματ[.]|[έα, κτλ., is the obvious one) that there were thirty-four letters to a line, we should have room in line 8 only for [δρ]αχμῶν ἐπαινέσ[αι δὲ το]γραμματέα κα[.]|[ι, and should have to assume the omission of *nu* (or *gamma*) as due to an error of the engraver, who also, more permissibly, wrote ἐστήλει (as restored by S.) in line 11.² If, however, we assume a *stoichedon* text of thirty-five letters we can correctly restore τὸν γραμματέα (line 8) and ἐν στήλει (or -ληι) in line 11, but only at the cost of postulating either a vacant space at the end of line 10 or of employing the rare alternative form γραμματέ|ια.³ On the whole, the longer line seems preferable, as it would also permit of the appropriate restoration in line 6 of [ἐθεσμο]θέτησαν ἐ[ννόμ]ως καὶ δικαίως, στεφά|[νῶ]σα|ι.

IX

Op. cit. 303 ff., no. 27.

In these conjoined fragments of a late fourth-century decree, which exhibit a much-damaged surface and at no point preserve more than half of the width of the stele, S. offers a restoration of line 4 only, establishing the line-length as twenty letters. His version of lines 1-9, which, as will be seen, includes some misleading conjectures, runs as follows:

[.¹⁰]ηλ[. . .]ι[.]κοστ
[.¹⁰]οχ[. . .]ος τὸν τ
[.¹³]νον διετ
[έλει εὐνους] ὦ[ν] τῶ[ι] δ(ήμ)ωι
5 [τῶι Ἀθηναίων.]α[.]τῶν ἐκ τ
[.⁸]ὀφε|ιλόντων πο
[.¹²] τῶν ἐκομι
[.¹⁰]ῶφ]ειλεν Ἀθ[η]ν[η]
[ναι.¹³]ο[. . .]

The restorations [ὀφε]ιλόντων and [ῶφ]ειλεν, perhaps influenced by a memory of the word ὀφειλόμενον in the previous decree-fragment (no. 26), are not acceptable, since in fact there is

¹ There is no need to cite parallels for this common phrase, of which a good example is quoted in note 3, p. 4 above. Cf. for many other examples the index to *SIG*³ s.v.

² Cf. Meisterhans, *GAI*³ 111; for fifth-century examples, *IG*. i.² 16. 25 (restored); 39. 59; 82. 16; 108. 34; 115. 7; *IG* ii.² 1. 27 (restored). This usage seems to have been much

less common in the fourth century, cf. *IG* ii.² 27. 10 (c. 394-387 B.C.); 141. 14 (not later than 360 B.C.), which all strengthen the case against Schweigert's restoration here.

³ Cf. *GAI*³ 45, n. 302; the use of -ια for -εα appears to be most commonly found in the period 350-300 B.C. For γραμματέα cf. *IG* ii.² 226. 19; 530. 3; 2943. 15-16.

no *iota* preserved before the *lambda* in line 6, and line 8 permits of a quite different restoration. The key to this is provided by the letters ἐκομί at the end of line 7, for when they are completed as ἐκομί[σατο, and followed by καὶ ἀπέστ]ειλεν Ἀθ[ή][ναζε] we see at once that the passage concerns the ransom and repatriation of Athenian prisoners, presumably after a defeat and most probably in a sea-fight. This in turn enables us to restore [ἀ]λόντων in line 6, completing the previous line as [τῶι Ἀθηναίων κ]α[ι] τῶν ἐκ τ[ῆς ναυμαχίας ἀ]λόντων.

Before transcribing the restoration proposed for these lines I would suggest that in line 1, for Schweigert's¹⁰. . . .ηλ[.]ι[.]κοστ we should read [εἶπεν· ἐπειδ]ῆ Ἀ[νακ]ί[σ]κος Τ-, but for the patronymic and ethnic I can add nothing to his Τ|. . . .¹⁰. . . .ογ[.]ος. The reference to a sea-fight, presumably that in the Ἑλληνικὸς πόλεμος of 323 B.C., suggests that Lykiskos may have been a native of some city within close reach of the scene of the battle, which we know to have taken place in the Hellespont, since Nikon of Abydos was one of the persons who rendered similar services to Athens on that occasion.¹ If, as would appear, there is no suitable ethnic known, we might reasonably conjecture Τ|.ἀπ[.]όχ[ον]ος. Whatever may have been his city, it is very tempting to believe that this is the same Lykiskos whose οἰκεῖοι are honoured in an Attic decree dated to 306/5 B.C. (*IG* ii.² 471), where they are mentioned as διατρίβοντες παρὰ τοῖς βασιλεῦσιν Ἀντιγόνωι καὶ Δημητρίωι, though the nature of their services is unknown as the lower part of the stele is lost.

In lines 2–3 it is clear that we should restore χρό]νον before διετ[έλει, and to link this with the *tau* at the end of line 2 I suggest τόν τ[ε] ἔμπροσθεν χρό]νον, as the more familiar construction of ὁ ἔμπροσθεν χρόνος with the preposition ἐν or ἐκ cannot be restored here. It is equally clear that there is a contrast between these past services to Athenian prisoners of war and more recent services, recorded in lines 10–14, which are too incomplete to permit of a convincing restoration; but we may at least conclude that several years may have elapsed between the date of the Ἑλληνικὸς πόλεμος and the passing of this decree. Before considering the possible contents of lines 10 onwards, I suggest the following restoration for lines 1–9:

[εἶπεν· ἐπειδ]ῆ Ἀ[νακ]ί[σ]κος Τ
[. . . .⁸. . . . (?)ἀπ[.]όχ[ον]ος τόν τ
[ε ἔμπροσθεν χρό]νον διετ
[έλει εὖνους ὥ[ν] τῶ[ι] δ(ήμ)ωι
[τῶι Ἀθηναίων κ]α[ι] τῶν ἐκ τ
[ῆς ναυμαχίας ἀ]λόντων πο
[λλοὺς τῶν πολι]τῶν ἐκομί
[σατο καὶ ἀπέστ]ειλεν Ἀθ[ή]
[ναζε ἀναλώμασιν τ]ο[ῖς αὐ]
10 [τοῦ, κτλ.

There is no need to furnish an impressive display of parallels for the wording suggested above, but we may note that, in the sense of ransoming, κομίζεσθαι seems to be less commonly used than λυτροῦσθαι: for the former cf. *IG* xii. 3, 79. 17 f., ἐκομισάμεθ[α τὰ παρ' ἐκείνοις σώματα ἀντὶ τοῦ] περὶ αὐτῶν συνχωρηθέντος ἀνη[λώματος], and for the latter, *IG* ii.² 283, in honour of Ph - - of Salamis,² who [πολλοὺς τῶν πολιτῶν] λυτρῶσάμενος ἐκ Σικ[ελίας ἀπέστειλεν Ἀθ[ή]ναζε τοῖς αὐτοῦ ἀναλ[ώμασιν; *ibid.* 399. 15 ff., for Eurylochos of Kydonia, who πολλοὺς Ἀθηναίων λ[υτρῶσά]μενος ἐκ Κρήτης ἀπέστ[ειλε τοῖς] | αὐτοῦ ἀναλώμασιν; *SIG*³ 520. 11 f., ἐλυτρώσαν[το

¹ The decree honouring Nikon of Abydos (*IG* ii.² 493 + 518) is quoted below, p. 8.

² Meritt kindly informs me that Wilhelm, in a letter, had

suggested for the end of line 14 the name Φ[ιλο]τ[ι]ον, and would restore Φ[ιλο]τιος in *Hesp.* xv. 178, no. 25, line 6.

π]αρὰ τ[ῶ]ν Αἰτωλῶν, in reference to the ransoming of 280 persons carried off from Naxos by Aetolian pirates; and a further reference to ransom is apparently to be found in *IG* ii.² 550, which I hope to discuss later.

For the sea-fight in which these Athenians were captured the epigraphical evidence is surveyed by Wilhelm (*Attische Urkunden* v (1942) 176–81), and the closest parallel to our decree may be seen in that passed in honour of Nikon of Abydos, mentioned above (*IG* ii.² 493 and 518, which W. added to this stele many years before (*AM* xxxix (1914) 271)); here we read τῶν ἐκ τῆς ναυμαχίας πολλοὺς τῶν πολιτῶν συνδιέσωσεν, κτλ. Among generous acts of repatriation we must not forget those of the poet Philippides on behalf of prisoners captured at the battle of Ipsus, as described in detail in *IG* ii.² 657. 20 ff.

Coming now to the lower half of our decree, lines 10–18, we must observe that Schweigert's transcript is misleading, for there should be one more letter indicated as missing at the end of each line, except no. 11, and consequently we must deduct one from the number of letters shown as missing on the left (except in line 10, where we must read 15 instead of 20, the latter figure clearly due to an oversight). It will save space and avoid detailed discussion to print his version side by side with the corrected text, in which I incorporate a few suggestions to show the general sense of lines 10–16.

10	[..... ²⁰]ινπ[.]	[τοῦ ¹³]νπ..
	[..... ¹⁷]ιτ[.]	 ¹⁷ιτ.
	[..... ¹²'Αθ]η[ναί]ων	[..... ¹¹'Αθ]η[ναί]ων [ε]
	[..... ¹⁴]ἐ[ν]τ[υ]γγχ	[ἴτε ξένων(?) οἷς ἄ]ν ἐ[ν]τυγγχ[ά]
	[..... ¹²τῶι] δῆμωι	[νηι' δεδόχθαι τῶι] δῆμωι [ἐ]
15	[..... ¹⁴]κα[.]ς[.]	[παινέσαι μὲν(?) δι]κα[ι]οσ[ύ]ν[η]ς
	[..... ¹⁵]ειαν[.]	[ης ἔνεκα(?).....στ]εφαν[ω.]
	[..... ¹⁵]σεγ[.]	 ¹⁴σεγ...
	[..... ¹⁵]ονει[.]	 ¹⁴ον ει...

In line 10 there is no *iota* visible before the νπ, which could scarcely occur together in the middle of a word, and a possible restoration for lines 10–12, based on the wording of the decree for the οἰκεῖοι of Lykiskos mentioned above, would be [αὐ|τοῦ, νῦν δὲ διατρίβω]ν π[αρ]ὰ τοῖς βασιλεῦσιν ἅε] | τ[ὰ] ἄριστα ποιεῖ 'Αθ]η[ναί]ων, κτλ.

In line 15 there appears on the photograph to be the lower half of an *omikron* before the *sigma*, and I can suggest no likely alternative to δι]κα[ι]οσ[ύ]ν[η]ς, but if στ]εφαν[ω.] is correctly restored in line 16, I cannot satisfactorily fill the gap (five spaces) before it. If Schweigert's εἰαν is retained the passage becomes even more obscure.

There is nothing left from the heading to indicate the date of this decree, but it is worth recalling that three of the other Attic decrees which Wilhelm has grouped together as referring to the Ἑλληνικὸς πόλεμος were passed in several different years, some soon after the event and others twenty, or more, years later. Thus, *IG* ii.² 492 and 493 belong to 303/2 B.C., 505 to 302/1 B.C., whilst 398 can be definitely dated to 320/19 B.C.; and to 318/17 B.C. belongs the decree-fragment published by Schweigert (*Hesp.* ix (1939) 30 ff., no. 8) which Wilhelm restores as possibly alluding to the rescue of Athenian citizens from the same sea-fight (*Att. Urk.* v. 179 f.).

If I am right in suggesting that the recipient of our present decree is the Lykiskos whose οἰκεῖοι were honoured in 306/5 B.C. (*IG* ii.² 471), we might reasonably allot both decrees to the same year; but it is not worth while to print a restoration of the introductory lines of our decree based on this assumption, for there is no real ground for the suggestion that they may have been moved on the same day or by the same person.

A. M. WOODWARD

THE CYCLADES IN THE LATER BRONZE AGE: A SYNOPSIS¹

(PLATES I-2)

THE present survey, based upon work carried out in the Cyclades in 1952 and 1953 and in museums in Greece and elsewhere, is intended to offer a more comprehensive view of Cycladic archaeology than has hitherto appeared. An attempt has been made to gather together both published and unpublished material from sites which flourished during this period; interpretations of the former have been revised in the light of recent knowledge of contemporary cultures in Greece and Crete. Unpublished pottery in museums has been studied, new sites recorded, and fresh evidence collected from the sites themselves.²

INTRODUCTION

Before this material is considered, some mention must be made of the view, once current, that in the Middle Bronze Age 'Phylakopi is the unique survivor of the Cycladic civilisation . . . the other islands are deserted, or at least cultural blanks'.³ An attempt was even made by Åberg to show that many of the Cycladic cist-tombs (notably in Melos, Naxos, Paros, Antiparos, Amorgos, Syros, and Siphnos) belonged to the Middle and Late Cycladic period.⁴ That there is in fact no lacuna in Middle Cycladic archaeology will, it is hoped, become clear from the survey of the material which will be given below, but a few facts may be recalled first which appear to show conclusively that the contents of the cist-tombs should be assigned to the Early Cycladic period.

Of the three classes of pottery found in the tombs, the stratigraphical evidence from the site of Phylakopi makes it clear that the class with simple herring-bone incision appeared first, for there it belongs to the very first settlement, antedating the First City for which we have house-remains.⁵ The comparatively early date of this pottery (the types of which generally have no pronounced base) is confirmed by the fact that similar types are characteristic of Early Bronze Age ware in Greece and Crete, while the 'stalked' vase (the only exception with regard to the base) is characteristic of the Early Bronze Age at Troy.⁶ The assigning of similar ware from Pyrgos in Crete to the Early Minoan III period is not convincing, for that site is unstratified.⁷

¹ Special abbreviations used throughout this article are as follows:

AMO The Ashmolean Museum, Oxford.

AntCret G. Maraghiannis, *Antiquités crétoises*.

AVAA B. Graef and E. Langlotz, *Die antiken Vasen von der Akropolis zu Athen*.

BMC i BMC I i (*Catalogue of the Greek and Etruscan Vases in the British Museum*).

Chron N. Åberg, *Bronzezeitliche und Früheisenzeitliche Chronologie IV*.

MCAC The Museum of Classical Archaeology, Cambridge.

MP A. Furumark, *The Mycenaean Pottery*.

MPL F. H. Stubbings, *Mycenaean Pottery from the Levant*.

Phyl Society for the Promotion of Hellenic Studies, *Paper 4* (1904): *Phylakopi in Melos*.

Strat C. F. A. Schaeffer, *Stratigraphie comparée et chronologie de l'Asie occidentale*.

UOP R. C. Bosanquet and R. M. Dawkins, *The Unpublished Objects from Palaikastro*.

² My particular thanks are due to Dr. Papadimitriou and Dr. Kondoleon for permitting me to study much of the material from their recent excavations in Mycenae and Naxos, and to Dr. F. H. Stubbings for many helpful suggestions during the course of my work.

³ H. Frankfort, *Studies* ii. 136.

⁴ Chron 71, 84. Cf. V. G. Childe, *The Dawn of European Civilization* 49.

⁵ Phyl 82, 162.

⁶ Troy i. ii, fig. 230, no. 36: 691.

⁷ J. D. S. Pendlebury, *The Archaeology of Crete* 85.

The second class of incised pottery with more complex designs and stamped circular patterns develops later in the Phylakopi stratification, and about the same time appears the patterned ware. A commonly occurring type in the latter technique is the sauceboat, which has parallels in Early Helladic II–III strata at Asine and Korakou. That such ware is referable to an early period is emphasized by the find, in one of the Syros tombs in which such a sauceboat appeared, of a pin of a type found in the Third City of Troy.¹ Moreover the same City produced examples of the type of blade found in several Cycladic tombs, and an example of a double-spouted sauceboat in gold.²

In only one case has incised ware been found in the same context as an authenticated Middle Bronze Age type; this was in Syros, where a Grey Minyan kantharos was found together with an incised pyxis, but it is very likely from the evidence that the Minyan vase represents a later intrusion.³ Indeed, it is expressly stated by the excavators at Phylakopi that in the Second City 'incised ware only survives in coarse household varieties that have no further significant history'.⁴ Although at Eleusis stamped pyxis lids were found in a Middle Helladic I deposit, and at Eutresis in a deposit transitional between Early Helladic III and Middle Helladic I, this does not necessarily prove that such ware was still being manufactured in the Cyclades. None of the patterned ware of the cist-tombs shows any affinity to well-authenticated Middle Cycladic types, but it is paralleled rather by some Early Helladic patterned ware, such as that found at Rafina, which has almost identical designs and types.⁵

Of all the sites in the Cyclades, it has been Phylakopi in Melos which has provided the most abundant material for study. It is hardly surprising that the island which possessed one of the richest deposits of obsidian (a material still used in the Late Bronze Age) in the Mediterranean area provides one of the most important settlements in the Aegean, but recently Kondoleon has shown that in Naxos too a settlement of not inconsiderable size flourished at the same time. But evidence has been found to show that at least twelve other settlements existed during the Middle Cycladic period, some of which had flourished earlier. The more widely distributed remains of the Early Cycladic period would suggest a greater population at that time, but it must be remembered that much of the evidence for this period comes from cemeteries for which no corresponding settlement has been discovered. On the other hand, we may perhaps suppose that some form of synoecism took place in the later period, which is generally admitted to have been a time of instability.⁶ It should be noted that without exception the settlements of the Middle Cycladic period share two features in common: they are either on or near the sea with sheltered anchorage near by, and they have close at hand some of the best land in the Cyclades from the agricultural point of view. These factors, taken in conjunction with the proximity of the Melian obsidian supply, would have made them self-supporting. There is no evidence, on the other hand, to suggest that more barren islands such as Pholegandros and Sikinos supported communities at this time. In Ios, Antiparos, Kimolos, and Andros, an island with many sheltered inlets, settlements may yet be found; in the two latter Late Bronze Age settlements did exist.

SITES

The following catalogue lists both known and hitherto unrecorded sites of the Middle and Late Cycladic periods. Only the main features have been noted, as the pottery is considered below.

¹ *Troy* II. ii, fig. 39: 9.

² *Strat*, fig. 168, 1, 13.

³ *AE* 1899, pl. 9, 27.

⁴ *BSA* iv. 28.

⁵ *PAE* 1951, 84, figs. 8, 9.

⁶ In the island of Keos some such synoecism appears to

have taken place. In the E.C. period the settlement on Akroterion Kefala was a flourishing one; later it was abandoned and its inhabitants may have been absorbed into the settlement at Ayia Irini, a mere 1½ km. south.

AMORGOS

Aigiale, modern Vigli. This site, consisting of a small acropolis in the north-west corner of the island, is situated about 1 km. west of Tholaria, and 200 m. above sea-level; the sea itself lies about 1 km. away to the north and west. Dümmler saw sherds here which he termed 'Mycenaean'.¹ The sherds which I saw testify to a period of occupation from the prehistoric to late classical periods, and included some fragments of Middle Cycladic pithoi. The ancient walls to be seen amid the modern terrace-walls are of archaic or classical date.

Arkesine, now Kastri. This is likewise an unexcavated acropolis site, situated directly on the sea in the southern sector of the island, 1½ km. north of Vroutsi; a small cove lies to the east. Its most outstanding feature today is a ruined Hellenistic tower, but to judge from the variety of sherds there, it was occupied for as long a period as Aigiale. Dümmler likewise noted 'Mycenaean' sherds here, and recently a group of Mycenaean bronze swords and daggers, presumably from a tomb, were recovered from the peasants living near by.² Evidence for a preceding Middle Cycladic settlement comes from tombs found in the vicinity, which contained pottery of a type transitional between the Early and Middle Cycladic periods.³

Xilokeratidi. This small village is built upon two slight promontories on the northern side of the Bay of Katapola, which provides the most sheltered anchorage in the whole island. There is a large archaic and classical site on the high ground of Minoa (now called Moundoulia) on the opposite side of the bay, but it was at Xilokeratidi that Bosanquet purchased a Mycenaean stirrup-jar of L.H. III type.⁴ Possibly this and other Mycenaean vases obtained from Amorgos came from tombs in the vicinity, and if this is so, it is more than likely that there was a Mycenaean settlement in the area, for land communications between the small plain, which lies to the east of the three villages of Moundoulia, Katapola, and Xilokeratidi, and the rest of the island are extremely difficult.

ANDROS

Palauiopolis. Three L.H. III vases, reputed to have come from Palauiopolis on the west coast, are in the museum in the town of Andros.⁵ Although Palauiopolis has been excavated in part, nothing of the prehistoric period has been found, although further searches in the area might uncover a prehistoric settlement, as the classical remains themselves were found at a great depth owing to the alluvial deposits brought down from the hills by the heavy winter rains.⁶ On the other hand, the smaller but more sheltered bays of Gaviron, Andros, and Korthi would seem better suited for such a settlement.

DELOS

Kynthos. On this small hill, which dominates the rest of the island, a settlement flourished in the Early and Middle Cycladic periods.⁷ Good anchorage is to be had between the island and Rheneia in fair weather, and in time of storm the inlet of Ormos Gournas can be utilized by small vessels.

The Temenos. Excavation has shown, somewhat accidentally, that in Late Cycladic times Mount Kynthos was deserted in favour of the flat land to the north-west, the area of the later Temenos. The most interesting discovery in recent years has been that of a 'votive deposit' under the Artemision, which included many fine pieces of Mycenaean carved ivory.⁸ The settlement in this area flourished throughout the Mycenaean period in all its phases.⁹ Evidence for tombs belonging to the settlement has been given by the find of an alabastron in the Purification Trench on Rheneia, and possibly also by the find of some Mycenaean pottery in the 'Hyperborean Tomb' by the Portico of Antigonos.¹⁰

KEOS (ZEA)

Ayia Irini. This site lies on a small low-lying promontory which juts southward into the Bay of Ayios Nikolaos in the north-western sector of the island, and on it stands a small church (PLATE 14). A few shallow pits were dug here by Welter.¹¹ A local Greek antiquarian also listed this among the island's ancient sites.¹² On both the east and west the sea has eroded the settlement, so that house-walls, some of them with fragments of painted plaster and probably belonging to the Mycenaean period, may be seen projecting. A modern road bisects the site and conveniently provides two complete, if rough, views of the stratification. On the west side of the promontory a series of large slabs of rock projecting into the water suggests that at this point was built a breakwater or quay (PLATE 15). On the east side cuttings in the rock for house-foundations have been slightly submerged; probably in prehistoric times the sea had not taken such complete possession of what is now the shallow Bay of Vourkari. On the evidence of the sherds, the settlement dates back to at least late Early or early Middle Cycladic times, and continued spasmodically to the Hellenistic period. Of particular interest were some fragments of Minoan pottery.

KIMOLOS

Ellinika. This site is in the south-west of the island, not far away from Phylakopi in Melos. In ancient times the small island of Ayios Andreas was joined to it, and Bent saw house-foundations in the shallow water which divides the two today.¹³ The coastline is much eroded and the sea has destroyed some of the site, which appears to have been

¹ *AM* xi. 40.

² *JHS* lxxi-lxxii. 251.

³ e.g. *AM* xi, pl. ii, c.

⁴ *CVA* Gt. Britain, pl. 484, 11.

⁵ See below, p. 31.

⁶ Cf. J. T. Bent, *The Cyclades* 289.

⁷ A. Plassart, *EADélos* xi. 11-50.

⁸ *BCH* lxxi-lxxii. 148-254.

⁹ *Op. cit.* 459-60.

¹⁰ C. Dugas and C. Rhomaïos, *EADélos* xv, pl. ii. 19; F. Courby, *EADélos* v. 63-74.

¹¹ My thanks are due to Prof. Wace for drawing my attention to this site.

¹² J. N. Psyllas, *The History of the Island of Kea* (1921) 303.

¹³ Bent, *op. cit.* 55.

inhabited from the close of the Mycenaean period to the Roman age.

KYTHNOS (THERMIA)

Ayia Irini. On a low conical hill between the southern creeks of the Bay of Loutra sherds give some indication of habitation here in the Middle Cycladic, and possibly also Late Cycladic Period. There is no great depth of soil here, and this does not seem to have been a site of much importance, but perhaps it attracted settlers on account of the safe anchorage to be had in the small cove of Ayia Irini to the east.

MELOS

Ayios Elias. Sherds, mainly from the Geometric to Byzantine periods, litter the slopes of this small natural acropolis standing 100 m. above sea-level near the coast on the eastern side of the Bay of Melos. Middle Cycladic sherds have been found there;¹ 'Mycenaean' sherds were seen by Mackenzie on the east slope.²

Phylakopi. This site, perhaps the most important in the whole of the Cyclades, was inhabited throughout the Bronze Age, as the excavations carried out by the British School of Archaeology have shown.³ It stands on the north coast of the island, and in ancient times probably consisted of a peninsula joined to the mainland at the south-west corner.⁴ The fortification wall which cut off the settlement from the mainland proper still stands to a height of 3 m. in places. Some of the settlement has clearly been eroded, and areas on the east have not been investigated. It is reported that some vases were carried away by the Germans during the last war. Shaft-graves and chamber-tombs were uncovered during the British excavations, but most of them were either ruined or plundered, so that it was practically impossible for the excavators to judge to what period they had belonged. Unfortunately most of the site is now in a bad state of preservation.

MYKONOS

Ormos Korfos. Two chamber-tombs of Mycenaean type, long since plundered, were seen here on the western side of the bay.⁵ As no Mycenaean settlement has been located in this or any other part of the island, it is possible that these tombs may have belonged to the settlement on Delos, which is only a few kilometres away by sea.

Palaikastro. This is a small flat-topped hill approximately 1½ km. inland from the south-eastern sweep of the Bay of Panormos. In ancient times it probably stood much closer to the sea, which has clearly receded, leaving behind it a long shoal beach. On the summit are traces of archaic and classical occupation, together with part of a fortification wall. On the south slope, however, I noted Minyan sherds and other evidence of occupation during the Middle Cycladic period.

NAXOS

Grotta-Palati. Grotta is the name given to the eroded coastal strip by the town of Naxia which lies directly to the south-east of the small island of Palati, joined to it by a causeway. Welter found abundant traces of prehistoric occupation in 1930 in the whole of this area.⁶ More recently Dr. Kondoleon has uncovered part of an important settlement covering the prehistoric and Geometric periods.⁷ A megaron of Mycenaean type has been found, and pottery belonging to the same period promises to be almost as plentiful as that from Phylakopi. The site is by no means exhausted, but it is difficult to excavate owing to the encroachment of the sea. The cemetery belonging to this settlement is indicated by a group of low mounds scattered with sherds on the rising ground north-east of Grotta.

Rizokastelia. This is a rocky natural acropolis about 1½ km. to the south-west of the village of Tripodhes. Like Palaikastro in Mykonos, it once stood much closer to the sea, which has now receded considerably to the west; peasants digging in the flat plain to the west frequently come across a deposit of sand and pebbles deep below the surface soil (PLATE 2a). The site was tested by Stephanos, who considered that it had had a long history from the early prehistoric to some later period.⁸ It was certainly inhabited in Middle Cycladic times, and as evidence for the Mycenaean period, I noted part of a L.H. III kylix near the summit.⁹ There are also abundant traces of habitation on the steep lower slopes, and the remains of a stepped street or stairway near the summit.

PAROS

Paroikia. The prehistoric, Geometric, and Hellenistic site lies on a small eminence in the centre of the town of Paroikia on the south coast of the bay. It was excavated by Rubensohn, who found there pottery belonging to each phase of the Bronze Age, together with scanty house-remains.¹⁰ The site is probably not exhausted, but the presence of a modern church and houses makes investigation in a southerly direction wellnigh impossible.

SIPHNOS

Kastro. This small natural acropolis on the east coast of the island is furnished with a small cove and beach to the south. It was investigated by the British School, and small quantities of E.C. and M.C. pottery were found, which the excavators believed to have been dislodged by builders at a later date.¹¹ In the region of the Kastro, but not on it, was found a Mycenaean sherd, which may indicate a small settlement at least during that period.

To Froudhi tou Kalamitsiou. This is a lofty outcrop of rock, practically sheer on its north side, about 1½ km. north of the harbour of Vathy. A small cove lies not far away to the north-west. 'Mycenaean' sherds were reported to have

¹ Now in the museum of the British School of Archaeology at Athens.

² BSA iii. 88.

³ Phylakopi (1904); BSA xvii (1910-11) 1-22.

⁴ BSA iv. 7.

⁵ AM xxiii. 362.

⁶ AA xlv. 132-5.

⁷ e.g. PAE 1949, 112-22; 1950, 269-80; 1951, 214-22.

⁸ Op. cit. 1910, 273.

⁹ A Middle Cycladic sherd of Melian origin from this site is in the museum of the British School.

¹⁰ AM xlii. 1-72, 89-96.

¹¹ BSA xlv. 15, 31-33.

been found here, and there are traces of scant occupation in the late Mycenaean period.¹

SYROS

Ayios Loukas. In an isolated tomb in this north-western area of the island, Tsountas found a Minyan vase in a cist-tomb which seemed to represent a secondary interment.² No settlement of the later Bronze Age, however, has been located. The most likely place for one would be below the modern town of Hermoupolis, which possesses one of the best harbours in the Cyclades, but in view of the extent of the town, the chances of finding such a settlement now seem remote.

TENOS

Akroterion Ourion. This small promontory rises into a conical hill approximately $2\frac{1}{2}$ km. south-east of the town of Tenos. To the west of it is a long shoal beach, and on the east a small rocky cove. It is unexcavated, but some sherds from the site are housed in the museum in the Church of the Virgin. There is abundant evidence for habitation here during all phases of the Bronze Age and the early part of the Geometric period, with the emphasis on the Middle Cycladic period, which is represented by much Minyan ware. At two points on the terraced slopes courses of large, roughly-hewn blocks can be seen; on the south side of the hill they still extend to a length of approximately forty paces, and in front of them is a slight abutment 1.4 m. in width (PLATE 2b). On the west a shorter stretch of similar blocks, in front of which a modern terrace-wall has been built up, is to be seen. As sherds of the prehistoric, and especially the Middle Cycladic period, are predominant on this site, I would venture to suggest that these blocks may represent part of a fortification system contemporary with

that built at Phylakopi, for the technique employed on the two sites is very similar. In the Early Cycladic period the fortification systems at such sites as Kalandriani in Syros and Ayios Andreas in Siphnos were composed of much smaller stones, whilst the fortification walls of the archaic and classical periods are more precise in construction than those at Phylakopi or Akroterion Ourion.

THERA (SANTORINI)

Therasia. The prehistoric site on the south coast of this small island was investigated by Alafousos and Nomikos, and later by Fouqué in 1867.³ Remains of two houses came to light which had been engulfed in volcanic ash by an eruption at some period anterior to that which created the central bay of Thera and cut off Therasia on the eastern side.⁴ The circumstances of their destruction have preserved details of house-construction in the later Bronze Age in a manner unique in the Cyclades.

Akrotiri. Pottery of a similar kind to that found in Therasia was uncovered in remains of houses at three points near the north coast of this promontory by Fouqué, Mamet, and Gorceix.⁵

Kamara. Similar remains and pottery were found by Zahn in the river-bed in this region in the south-eastern sector of Thera.⁶

Exomiti. This is the provenance given for a vase purchased by von Schiff in 1879.⁷ It is an area, however, better known for its rock-cut tombs of a much later date.

Akrot. Koulomvon and Mesavouno. Vases belonging to the same period as the above are reported to have been found in both these areas, in the extreme north and south of the island.⁸ There is no evidence to attest a settlement of Mycenaean type in this or any other area of the island.

THE CYCLADIC POTTERY OF THE MIDDLE BRONZE AGE

The following analysis is based upon the sequence of styles found at the site of Phylakopi in Melos, for not only has the bulk of the pottery belonging to this period been found at this site, but also it was the potters of Melos who were foremost in creating a distinctive Cycladic style. In this new classification the nomenclature adopted by the excavators has been to a certain extent discarded; the pottery has been divided up into homogeneous classes according to type and decoration.

A. THE RECTILINEAR STYLE⁹

Under this somewhat comprehensive heading I include three classes of pottery decorated with predominantly rectilinear patterns. We are concerned with three techniques, lustrous dark-on-light, matt dark-on-light, and light-on-dark. In the first two a light slip is added to the dark red of the clay, and in the third the surface of the pot is usually slightly burnished before the white paint is applied. The bulk of the material comes from Phylakopi, being furnished by the later

¹ Cf. D. Fimmen, *Die Kret.-Myk. Kultur* 14.

² *AE* 1899, pl. 9, 27 (a small Grey Minyan kantharos).

³ Fouqué, *Santorin et ses éruptions* 96–103.

⁴ H. S. Washington, *AJA* ix. 512.

⁵ Fouqué, *op. cit.* 105–7.

⁶ H. von Gaertringen, *Thera* iii. 39 ff.

⁷ *Op. cit.* 42.

⁸ *AZ* xxiv 258*. Finds of Lenormant.

⁹ I am indebted to Sir J. Forsdyke for suggesting this as a replacement for the more confusing 'Geometric' appellation of the excavators.

deposits of the First City and some deposits in the Second, a fact which indicates that the fall of the First City did not seriously interfere with the ceramic development.¹ The first technique had its origin in *Urfirnis*, and the designs on many of the pots are taken over from the still popular incised wares, as Furumark has shown.² The second technique evolved later, probably because the Melian potters discovered that the lustrous paint did not show off to advantage on their coarse and porous clay.³ The third technique was derived directly from contemporary E.M. III and M.M. I ware. Examples of the three classes have also been furnished by Paros and Amorgos, whilst sherds of the second technique came to light in Keos and Tenos, and were found in Naxos by Kondoleon. The types are as follows.

Beaked jug. This is represented most commonly in the dark-on-light techniques. The attachment of the handle close to the neck shows it to have an origin common with that of the so-called duck-vase.⁴ Usually there is no pronounced base, but it does occur in one example in conjunction with a body of somewhat angular profile which indicates that the vessel was made in two sections and later joined.⁵ The commonest form of decoration is one of horizontal stripes across the beak and shoulder, with a pendant scheme of decoration below which occasionally shows curvilinear tendencies; this is a scheme of decoration paralleled on jugs from Crete and Aegina.⁶ One jug from Amorgos, however, is of particular interest on account of its rather unusual decoration incorporating a cross and small circles.⁷ These elements of a non-Cycladic character perhaps provide a clue to the origin of similar decorative features which occur on some sherds from Phylakopi in the matt dark-on-light technique.⁸ It is a form of decoration which points to the East; indeed close correspondences are seen on pots from stratum 4 at Tépé Gawra in Iraq.⁹

Pithos. Of two types, the first with narrow neck and flat rim did not occur very often.¹⁰ The more popular type has a ledge rim and two vertically pierced side-lugs, and much heavier proportions.¹¹ The decoration is usually confined to the area above the handle level, although there is often a pendant scheme below, as on the jugs.¹² The upper decorative field consists most often of vertically or horizontally divided zones, sometimes incorporating cross-hatched ornaments and even circular motifs, such as seem to have been derived from patterns on Cretan light-on-dark ware.¹³ It is in this type of vessel that we find close parallels for the decoration of some Middle Helladic pithoi from Aegina and the Mainland.¹⁴

Round-necked jug. This type seems to have been less popular than the beaked type discussed above. One example in the light-on-dark technique is supplied with

plastic 'breasts', an Anatolian characteristic which recurs later; others are decorated with a pendant scheme.¹⁵

Spouted bowl. Numerous examples of this type which evolved from the incurved bowl of the Early Bronze Age were found at Phylakopi. The decoration in matt dark-on-light technique is confined to the exterior of the rim, the rest of the vessel being left plain or in some cases covered with a red, burnished slip.¹⁶ The type was a popular one and the simple decorative scheme (at least in its more linear forms) has parallels in Aegina and on the Mainland. Again there is a connexion with pottery from the East, for several bowls from Tarsus show similarities.¹⁷

Cup. To judge from the evidence at Phylakopi, two shapes were current. The first is straight-sided, with one vertical handle, and is most commonly represented in the matt dark-on-light technique.¹⁸ The second has a more elegant, convex profile, and no handle; possibly it is the forerunner of the 'panelled cup' of a later period.¹⁹ Both are painted with the same type of ornament. A unique specimen with possibly two handles seems to have copied some Minyan type.²⁰

Kernos. The kernos, or 'cluster-vase', is a peculiarly Cycladic type, and its manufacture seems to have ceased with that of the production of this class of ware. Several examples were furnished by the tombs and settlement of Phylakopi, all decorated in the dark-on-light technique mostly with zigzag patterns.²¹

Spouted jar. One complete example was found at Phylakopi with a small basket-handle across the rim, decorated in matt black. Another example with perforations, although fragmentary, seems to have belonged to the same type.²²

Askos. This type does not seem to have been commonly found among this class of painted ware. One example has an unusual design of hatched strips and vertical fish alternating, while the other, apparently a much taller specimen,

¹ *Phyl* 258-9.

² *MP* 217-19.

³ *Phyl* 93, n. 1; 251.

⁴ Cf. op. cit. pl. ix. 7 with pl. iv. 6.

⁵ *BSA* xvii, pl. v. 162.

⁶ e.g. *Phyl* pl. ix. 2-10; *AM* xlii, figs. 58, 59, 61, 75. Cf. Aegina Museum no. 1495; Iraklion Museum no. 3893 (from Palaikastro).

⁷ *CVA* Denmark, pl. 37, 2.

⁸ e.g. *Phyl* pl. xiii. 1-5.

⁹ *Strat* fig. 92, 13.

¹⁰ *Phyl* pl. viii. 5, 6, pl. xiii. 12, 15, 19.

¹¹ Op. cit. pl. viii. 4; *BSA* xvii pl. iv. 183; v. 65, 168.

¹² e.g. *Phyl* pl. viii. 4.

¹³ Cf. op. cit. pl. x. 18, 19, 22, with H. Boyd-Hawes, *Gournia* pl. xii. 34.

¹⁴ See below, p. 23.

¹⁵ *CVA* Denmark, pl. 36, 6.

¹⁶ *Phyl* pl. xi. 7, 8; xii. 1-18; xxxiii. 3-8.

¹⁷ *AJA* xli. 264, fig. 10.

¹⁸ e.g. *Phyl* pl. viii. 9-11, x. 1-17; *BSA* xviii, pl. vi. 133, 245.

¹⁹ e.g. *Phyl* pl. viii. 8, 12.

²⁰ Op. cit. pl. xi. 14.

²¹ e.g. *CVA* France, pl. 540, 8, 10.

²² *BSA* xvii, pl. vi. 165; *Phyl* pl. xxv. 15.

has a decoration of cross-hatching; its form is reminiscent of the Mycenaean stirrup-jar.¹

Two-handled jar. This bag-shaped type is furnished with a slight spout, and is paralleled by a M.H. I type found at Asine.² Of two examples from Phylakopi, the more interesting is decorated with a simple but realistic drawing portraying a bird in the act of catching a worm; a star in the field serves as filling-ornament.³ Many similar animal and human forms (not to mention the representation of a ship with tall mast and one bank of oars, which must be one of the first portrayals of its kind in Aegean art) are found in the later examples of pottery painted in the matt dark-on-light technique.⁴ Some of these clearly are pictorializations of hatched geometrical figures, as is seen in a transitional example, where the head, legs, and tail of an animal have

been added to a hatched triangle.⁵ Similarly a snake is pictorialized from a loose spiral ornament.⁶ Pottery from the site of Kolonna in Aegina shows that there also potters were experimenting along similar lines, but the source for the new trend may have been Crete, where several examples of such pictorialization have been found.⁷ Quite recently a sherd painted in the light-on-dark technique was found in the M.M. I palace of Phaistos showing a human figure very like one in the same technique from Phylakopi.⁸ Interesting as these quaint human and animal figures are in themselves, their importance lies in the fact that with their advent the way was being paved for the free-field type of composition; for the new creatures could not be confined within the rigid schemes of rectilinear division which is the hallmark of the Rectilinear Style.

B. MINYAN WARE

On excavated sites in the Cyclades Grey Minyan pottery has been found and published from four, namely Melos (Phylakopi), Paros (Paroikia), Siphnos (the Kastro), Syros (Ayios Loukas). Some also occurred in Kondoleon's excavations in Naxos (Grotta). To this list may be added three other sites where Grey Minyan sherds appeared on the surface, namely Keos (Ayia Irini), Mykonos (Palaiokastros), and Tenos (Akroterion Ourion). Some of the Minyan ware found on these sites appears to have been imported, but other examples are local imitations of the Mainland fabric. These latter can be detected from the gritty nature of their fabric and the comparatively large amounts of mica which it contains, whilst there are also eccentricities of colour and profile. The excavators at Phylakopi were of the opinion that the bulk of the Grey Minyan which they found there had been imported.⁹ As the amount of the material is not great, it has been thought convenient to consider together both the imported pottery and the local products which imitate it. At the close of the section some fragments of coarse pottery which show affinity to the Minyan types have been included.

Stemmed goblet. There are two variant types. Common to both is the tall hollow stem, which may be plain or corrugated. In the first type two side-handles continue the profile of the body and are attached to the rim; in the second there are two large loop-handles rising above the rim. Both types are angular in profile. Both variants enjoyed a fairly wide distribution on the Greek mainland, both in Central Greece and the Peloponnese, so that it is not surprising to find that the bulk of the Cycladic material belongs to this type. Many of the finds consist of corrugated stems, so that it is not always possible to assign them to one of the two variants with certainty. There are unpublished fragments of such stems from Naxos (Grotta), and others come from the sites in Keos, Mykonos, and Tenos. Of the three examples from Tenos shown in FIG. 1, nos. 1-3, the eccentricity of the profile of the first shows it to have been locally manufactured, whilst the other two conform to the stock

Mainland type and were probably imported. Some fragments from Keos, however, were obviously locally manufactured, for the corrugations are set widely apart, and the clay, which is very gritty, is a typically Cycladic one. Most of the fragments published from Paros and Siphnos seem to have been of the imported kind.¹⁰ Some sherds found at Phylakopi were considered at the time to have been examples of Argive Minyan; on the other hand they may have been locally made, for one can detect on some of them a thin slip applied with a brush to improve the gritty and pocked surface.¹¹

Fragments certainly belonging to the first variant were found in Melos (Phylakopi) and Siphnos, and in Paros the variant was imitated, although one example shows that the potter found it easier to add pierced lugs of a primitive type rather than the usual handles.¹² In two local fragments from Keos and Tenos (FIG. 1, nos. 6, 7) we also observe

¹ *Phyl* pl. ix. 11; fig. 74.

² O. Frödin and A. W. Persson, *Asine* fig. 184, 9, 10.

³ *Phyl* pl. ix. 5, 6.

⁴ e.g. op. cit. pl. xii. 5, 21-29; *BSA* xvii, pl. xiv. 36-38.

⁵ *Phyl* pl. vii. 4.

⁶ Op. cit. pl. xii. 22.

⁷ e.g. *UOP* pl. ii.e.

⁸ *ILN* 19 Jan. 1952, fig. 1; cf. *Phyl* pl. xiii. 17.

⁹ *BSA* xvii. 17, '... it could never pass at Phylakopi for anything but an imported fabric'.

¹⁰ *AM* xlii, figs. 31, 33; *BSA* xlv. 33, fig. 7, nos. 6, 7.

¹¹ *BSA* xvii. 18.

¹² *BSA* xlv, loc. cit. nos. 3, 4; *BSA* xvii, pl. vii. 27; *AM* xlii, fig. 34.

that the sharp angularity of the Mainland type was not always faithfully reproduced. Belonging to the second variant are fragments from Melos and Paros, apparently of the imported variety.¹ A sherd from Siphnos reproduces the indentations on the shoulder of the Paros specimen.² From Tenos comes a sherd (FIG. 1, no. 5) belonging to an imported example with similar indentations, but with a profile paralleled rather by an example from Molyvopyrgo in Macedonia.³

Goblet with convex profile. This type has a much lower foot than the preceding one, and it is never corrugated. Frag-

found by Tsountas in an isolated tomb in Syros.⁵ There are no other certain examples of the type from the Cyclades, although some flat bases found in Tenos (FIG. 1, no. 4) and Siphnos may have belonged to this type.

Two-handed flask. One example of a 'pilgrim' flask occurred at Phylakopi, and it is unique in Minyan ware.⁶ The type occurs in Early Bronze Age pottery at Troy, but our example may have been influenced by the type which occurred in M.M. IIA pottery.⁷

Coarse ware. Fragments of coarse, domestic ware can also

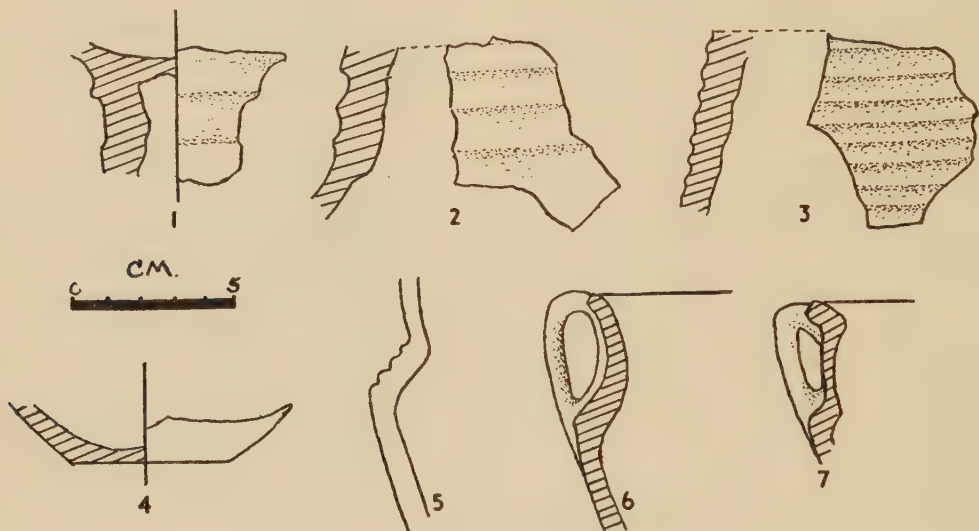


FIG. 1. MINYAN POTTERY

ments of this type come from Melos and Siphnos.⁴ Possibly this type was also the model for several goblets in a fragmentary state from Tenos, which are made in the local brown clay.

Kantharos. One example of this type with flat base was

be paralleled by examples of Middle Helladic pottery on the Mainland. Vessels with an angular profile were found in Delos and Tenos and are very similar to pots from Eutresis.⁸ For vessels with a convex profile Asine has provided parallels.⁹

C. BURNISHED FABRICS

The technique of burnishing a pot, to which a slip of varying thickness had first been applied, was employed by Cycladic potters as well as Helladic.¹⁰ The method is one which was commonly used in the Early Bronze Age, particularly for the incised wares. In the period under review, however, it was used either on vases which imitated Minyan types, or employed as a suitable background on which to paint patterns in white, thus copying the effects of the Minoan glaze-paint.¹¹ But the white paint used on the Cycladic vases is of poor quality, and cannot compare in brilliance with some Cretan examples.

¹ *BSA* xvii, p. xiv. 49, 50; *AM* xlii, fig. 32 (base wrongly restored).

² *BSA* xlv, fig. 7, no. 1.

³ W. A. Heurtley, *Prehistoric Macedonia* no. 398.

⁴ *BSA* xvii, pl. xiv. 53; (Siphnos) sherds in the Apollonia museum.

⁵ *AE* 1899, pl. 9, 27.

⁶ *BSA* xvii, pl. xiv. 51.

⁷ *PM* II, i, fig. 121.

⁸ *EADelos* xi, figs. 39, 40. H. Goldman, *Eutresis* fig. 245, 1, 2.

⁹ *Asine* fig. 2, 3.

¹⁰ e.g. *Eutresis* figs. 170, 172.

¹¹ Such light-on-dark ware is, of course, of later date than that of Class A above.

Stemmed goblet. The common Grey Minyan type was executed in a red burnished technique in Melos and Siphnos, as on the Mainland and in Aegina.¹ A fragment copying the second variant with rising loop-handles was found at Phylakopi, and is unique by reason of its festoon decoration carried out in white paint.² The form of the design is similar to that incised on some Mainland goblets, but it also occurs in the same medium on MM. IB ware at Knossos.³

(PLATE 2c). The handle is applied to the body in a somewhat rough fashion (FIG. 2, A), but on another fragment from the same site (FIG. 2, B) it is more elegantly smoothed off into the body, as it is on all other examples of the type which I have seen. A fragment with a similar black burnish came to light in Mykonos, and there are also complete examples from Melos and Thera. One unpublished example from Phylakopi, now in the National Museum at Athens, is

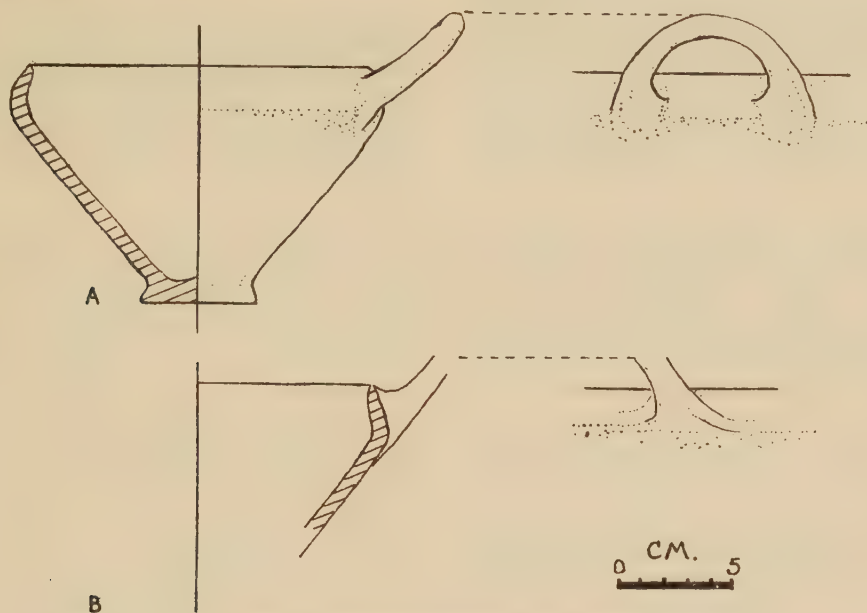


FIG. 2. LOOP-HANDLED BOWLS FROM KEOS

Fruitstand. This type consists of a flat, plate-like bowl furnished with a single or double lug on each side of the rim and set on a plain flaring stem like that of some of the goblets. One complete example and fragments of two others have been published; the rim is decorated with simple designs in white.⁴

Spouted bowl. A fine polychrome effect was achieved by the Melian potters when they used the red burnished technique on the interior and lower part of the exterior of this traditional type; the rim was slipped buff for the application of geometrical patterns in matt black.⁵

Bowl with one loop-handle. In its perfected form with a raised base this type appears to have occurred only in the Cyclades. Baseless examples from Anatolia should probably be considered as its direct prototypes.⁶ An almost complete specimen from Keos is covered with a black burnished slip

of approximately the same size as the bowl from Keos, but the Thera examples range from this comparatively small size to one 20.9 cm. high.⁷ A handleless specimen from the same island is decorated with white spots around the rim.⁸

Bridge-spouted jar. Examples from Melos and Thera covered with red burnish are furnished with a series of knobs equally spaced on the shoulder.⁹ An unpublished fragment, possibly without this plastic feature, comes from Keos. A fragmentary example from Phylakopi has decoration in white imitating Minoan Kamares ware such as was found on the site.¹⁰

Round-necked jug. One example of this type from Phylakopi is decorated with a running spiral pattern and zigzags in white.¹¹ When published it was called 'Kamares Ware', but both the shape and decoration seem to me to be Melian,

¹ e.g. *Phyl* fig. 137; *BSA* xvii, pl. vii. 4, 201; xlv, fig. 6, no. 5; cf. Aegina museum nos. 1509, 1524.

² *Phyl* pl. xxiv. 14.

³ Cf. *Asine* fig. 188, 2, 3, 5; *PM* i, fig. 128.

⁴ *Phyl* pl. xxiv. 13; *BSA* xvii, pl. vii. 167, pl. xiv. 46.

⁵ *Phyl* pl. xxxiii. 3-5.

⁶ e.g. *Troy* II, ii, fig. 176, no. 32: 65 (cities II-V); *AJA*

xlii. 37, fig. 17 (from Tarsus).

⁷ e.g. Thera museum, Akr. C 2, furnished also with a spout.

⁸ *BCH* xlvi. 120, fig. 7b.

⁹ *Phyl* fig. 139; Thera museum, Akr. A' 2, 14.4 cm. high.

¹⁰ *BSA* xvii, pl. vii. 210.

¹¹ *Phyl* pl. xxiv. 8.

although it seems to be influenced by M.M. III light-on-dark ware.¹

Cup. At least three whole specimens of a single-handled concave-sided type were found at Phylakopi.² They are contemporary with the jug considered above, being decorated in two cases by a running spiral pattern, and in the third by a zigzag pattern in white.

Pithos. Fragments of a pithos type were found at Phylakopi covered with a red burnish and decorated with a relief pattern or horizontal ridges or spirals and flattish knobs; fragments of the same type come from Keos.³

Spouted jar. A large, flat-based jar with a spout and one handle was found in Thera.⁴ It is decorated with red lilies on a red burnished ground; a fragment of a similar jar with lily decoration was found at Phylakopi.⁵ The design is

frequently found on M.M. III ware at Knossos, and frescoes incorporating the same floral motif were found in both Thera and Melos.⁶

Strainer. A published example from Thera is contemporary with the spouted jar from Thera just described; its decoration consists of white crocus plants on the lower part of the vessel, and white lilies on the upper, on which are pierced lugs in the place of handles.⁷

Rhyton. There are several published and unpublished examples of a conical type of rhyton which seems to have been in vogue in Thera at the very end of the Middle Cycladic period.⁸ They are decorated merely with red burnish, which on some of them has lost most of its lustre. One of them bears traces of the fire which destroyed the house in which it was found.

D. THE CURVILINEAR STYLE

In this section is included pottery with designs of a curvilinear character painted in matt black, which, along with the ware of the next section, Edgar termed 'Early Mycenaean Style'.⁹ Although the potters at Phylakopi alone seem to have made pots in this style, and exported their products to the islands (for example to Rizokastelia in Naxos) and to the Mainland, yet reflections of the style are seen in some pots from Amorgos and Thera.¹⁰ The basic element in the decoration of these pots is the spiral or circle, out of a combination of which various curvilinear patterns are formed. These seem often to have been directly inspired by patterns on M.M. II ware, such as the Kamares Ware found on the same site, where motifs such as the conventionalized rosette, hatched spiral, and segmented circle predominate. It is true to say that in many instances the Minoan compositions have been 'dissolved', as Furumark has commented, but it is hardly fair to add that the regrouping of the motifs by the Melian artist is 'aimless'.¹¹ The decoration of some bowl interiors is particularly well suited to the circular field. Although the polychromy of the prototypes is not attempted, some variation of tone is achieved by the hatching of some portions of the designs. It is interesting to trace the models for the designs on sherds of Minoan ware found on the site.¹² It should be stressed, however, that the vases of the present class do not slavishly copy such models, but are thoroughly Cycladic in character. In some vases the fabric is similar to that of the matt dark-on-light ware of the Rectilinear Style, and often a thin, light-coloured slip is applied to the reddish clay before the black paint is applied, but more often both slip and clay are of the same greenish-buff colour.

Beaked jug. This type is directly descended from the type of the Rectilinear Style. It now has a raised base and the neck is longer with a slender beak, or less commonly the neck is short and the beak takes the form of an elongated flange.¹³ The general proportions of the type therefore are rather more refined than before. A somewhat conservative example from Amorgos, which was made in two sections as

a jug of the earlier style, is not, as might appear at first glance, to be assigned to that class, but to be considered as a 'country cousin' of the Curvilinear Style type, as manufactured at Phylakopi, for the decoration attempts to copy the decoration of this class.¹⁴ Similarly, a double vase from the same island shows the same kind of motif.¹⁵ Many of the jugs from Phylakopi are decorated with plastic 'breasts'

¹ Cf. *BMC* i, A 587 (Knossos), A 578 (Palaikastro).

² *BSA* xvii, pl. vii. 66, 175, 240.

³ *Phyl* pl. xxxiv. 9; *BSA* xvii, pl. xiv. 45.

⁴ *BCH* xlvi 126, fig. 15 (wrongly printed fig. 16).

⁵ *Phyl* pl. xxiv. 9.

⁶ Cf. *BMC* i, A 592.

⁷ *Chron* fig. 237.

⁸ *BCH* xlvi. 123, fig. 11a-c. Also, e.g., Thera museum, Akr. A 456.

⁹ *Phyl* 108, section 9.

¹⁰ e.g. *Hesperia* vi. 554, fig. 10d (Athens); G. E. Mylonas, *Prehistoric Eleusis* fig. 66, 1.

¹¹ *MP* 220.

¹² e.g. *Phyl* pl. xv. 2 and fig. 131.

¹³ e.g. *BSA* xvii, pl. xiii. 35.

¹⁴ *CVA* Denmark, pl. 37, 3.

¹⁵ *AM* xi, pl. ii. 7. This motif is seen on the sherd from Phylakopi, MCAC, PP. 65.

a characteristic distinctly Anatolian; the anthropomorphic illusion is sometimes emphasized by the painting of 'eyes' on the sides of the beak. Similar details occur on a series of jugs from Thera, which are clearly derived from the Phylakopi type, although their designs are not so complex, consisting usually of a necklace of spots and bands round the lower part of the body, though one has a series of 'eyes' round the middle.¹ A fragment from a similarly decorated pot comes from Tenos.

On the jugs from Phylakopi the decoration is of two kinds: either the body is divided up into horizontal zones of ornament, or, more often, there is one large decorative motif below the spout together with accessory ornament.² Mention should be made here of the so-called 'winged imps' which occur on several vases.³ They were compared by Evans to similar fantastic, though more complete, figures on a Mochlos signet and on some of the Zakro sealings.⁴ But if the Cretan examples are rightly assigned to the M.M. III period they would seem to postdate the Cycladic figures and therefore could hardly be considered as their prototypes. Another explanation would be that we have in these weird figures but another example of the pictorialization which is already apparent in the decoration of late examples of the Rectilinear Style; the same trend is apparent in the anthropomorphic attributes of the jugs.

Bowl. This type is a new one in Melian pottery. It is shallow, with no base, and has two loop-handles rising from the rim. Possibly it imitates a Minoan type of metal bowl, most of the examples of which date from the M.M. III period, although there were some earlier specimens.⁵ The interior alone is decorated, being divided up into zones of ornament or decorated with one complex pattern.⁶ In two examples, however, neither of these schemes is adhered to, for spiral and circular motifs are scattered somewhat haphazardly over the circular field.⁷

Cup. The shallow M.M. II type is now adopted, being

decorated on the exterior with zones of ornament, in which case the interior receives a coat of matt red paint (in imitation of the lustrous wash on the interior of Minoan cups), or on the interior with one curvilinear design.⁸

Spouted jar. The type now in vogue is of the 'tea-pot' variety, not unknown in Crete although its origin is Anatolian.⁹ One fragmentary specimen from Phylakopi incorporates, somewhat unhappily, zones of spiral and geometric ornament, and also what appears to be a figure scene, rather after the manner of a needlework sampler.¹⁰ At least three specimens were found in Thera of the same type.¹¹ These are practically identical with one another, for on either side of the vases is a segmented circle pattern which was much in vogue at Phylakopi, and on either side of the spout are 'eyes' which are also found painted on some of the beaked jugs.

Bridge-spouted jar. Several fragments were recovered from Phylakopi which represent the first appearance of this typically Minoan form into Melian ceramics. Two fragments show a zonal form of decoration, but a more unusual piece has a frieze of animals which are obviously pictorialized from a Minoan 'connected-ivy' pattern such as was found on a teacup from the site.¹² Another has a design of conventionalized rosettes of M.M. I-II form.¹³

Small jar. One complete example comes from Phylakopi. It has two zones of ornament on the exterior, one a guilloche, the other a running-dog design.¹⁴

Amphora. An example of the Minoan type with elliptical mouth and side-handles from shoulder to rim was found in Thera decorated with a similar segmented circle pattern as on the spouted jars from the same site.¹⁵

Pithos. One fragment decorated with a shell-like pattern derived from a hatched spiral belongs to a similar type of pithos to that in vogue during the Rectilinear Style.¹⁶

E. THE NATURALISTIC STYLE

In this section is described the matt-painted ware of the latest deposits of the Second City of Phylakopi, which Edgar also termed 'Early Mycenaean'.¹⁷ It is a peculiarly Melian style, and its patterns are influenced to a large extent by the evolution towards naturalism which was taking place in the decoration of M.M. III pottery; it also seems to have derived inspiration from such naturalistic frescoes of Minoan type as were found on the site.¹⁸ Some of the decorative elements, therefore, are taken from animal life, and these appear in naturalistic settings as they do on the frescoes. Curvilinear patterns are still used, but they take on a new guise, appearing as plant tendrils. On some pots we can almost see the transition taking place; one cup,

¹ e.g. *Chron* fig. 230; *BCH* xlv. 130, fig. 20.

² e.g. *Phyl* pl. xiv. 4, 6; *BSA* xvii, pl. xiii. 173.

³ *Phyl* pl. xiv. 6, 9. ⁴ *PM* i. 274.

⁵ *Phyl* fig. 77; cf. *PM* n. ii, fig. 395, *The Vaulted Tombs of the Messara* pl. xlv. 1491.

⁶ e.g. *Phyl* pl. xv. 17, 18, 20, figs. 78, 79, 144; cf. *PM* i, fig. 194.

⁷ *Phyl* fig. 80, 81.

⁸ e.g. op. cit. fig. 85; cf. the Minoan cups, figs. 132, 133. Also pl. xv. 1-11, fig. 86 (first type), figs. 83, 84 (second type).

⁹ Cf. *VTM* pl. xlv. (top); *Strat* figs. 167, 193.

¹⁰ *Phyl* pl. xix. 8.

¹¹ *Chron* fig. 240; *BCH* xlv. 142, fig. 30 (wrongly restored with two handles); Thera museum, Akr. H 30.

¹² *Phyl* pl. xviii. 11, 12; cf. Minoan cup fig. 133 for fig. 89.

¹³ Op. cit. pl. xviii. 1; cf. *BMC* i. A 496, 510.

¹⁴ *BSA* xvii, pl. xiii. 185.

¹⁵ *BCH* xlv. 119, fig. 5a.

¹⁶ *Phyl* fig. 143; part of this is now in MCAC, PP. 71.

¹⁷ Op. cit. 113.

¹⁸ e.g. op. cit. figs. 61, 65.

for example, has an isolated spiral as its chief ornament, whilst round the rim is the naturalistic 'bracket-pattern' which occurs on almost every example of pots painted in the Naturalistic Style.¹ Although this class seems to have been limited in its manufacture to Phylakopi, it had a certain popularity elsewhere, being exported to Paros, Siphnos, and Thera, and also to Athens.² The fabric of the pots is very similar to that of those of the preceding section. There are comparatively few impurities in the clay, but mica is always observable.

Panelled cup. These cups were termed 'panelled' by Edgar; only the side which would be turned away from the drinker is decorated. They have one handle, a convex bowl, and a very short stem; the interior is given a red wash. Seven practically complete specimens illustrate the variety of the designs and the skill with which the Melian painter could portray wild life. The first shows a waterfowl in flight, the second a partridge(?) against a background of reeds and grasses.³ In the second cup we see a pleasantly drawn palmette used as filling-ornament; this is a motif which came to be over-worked, and it was adopted by Mainland painters.⁴ Two other cups have patterns which are borrowed directly from M.M. III designs: the first imitates some mottled-stone design (and uses white paint, like its model), and the second is decorated with the conventional rock-pattern of the frescoes.⁵ Another cup is patterned only with finely drawn palmettes, two others with naturalistic fronds, and a fourth has a more abstract design.⁶ Other decorative motifs occur on sherds: stylized bucrania, connected loops, and a variety of plant-tendrils.⁷ It should be noted that not only the decoration of such cups but also the type itself influenced Mainland potters.⁸

Shallow panelled cup. This type does not seem to have been so common as the other. The decorative field is naturally restricted by the cup's dimensions, although some of the same designs, such as birds (and fish), palmettes, and tendrils, appear on it.⁹

Bowl. Several large fragments probably come from bowls of the type which was painted in the Curvilinear Style. The designs again embody animals and plants.¹⁰

Spouted bowl. This traditional type is now decorated with simple naturalistic patterns round the rim. An example

from Phylakopi is ornamented with the 'bracket-pattern' and one from Thera (which seems to be an import from Phylakopi) with a connected-loop design.¹¹

Bowl with one loop-handle. Two complete examples of the type which occurs in the burnished technique are decorated in this style, in one case with a simple naturalistic spiral pattern round the rim.¹² There is also a plain specimen from Thera.¹³

Beaked jug. The beaked jug now has a higher base than before; the spout, too, is pulled back, so that the full-throated 'bulge', which is a particular characteristic of the jugs of the next section, is produced. Three complete specimens come from Phylakopi, among which is the tall 'Griffin' vase. Evans believed that the birds of the 'Black and Red' class evolved from the creature on this vase, but a simpler explanation would be that those birds are related to the birds of the present class, with which they are contemporary.¹⁴ Another jug is smaller, and retains the plastic features of jugs painted in the Curvilinear Style, but its naturalistic spirals assign it to the present class.¹⁵ The third specimen has the same plastic ornament, and painted 'eyes' on the beak, but a floral pattern on the body; an example from Thera has similar painted 'eyes' and vegetable decoration, while another jug from Amorgos which has lost most of its painted decoration has not only plastic 'breasts' but also 'ears'.¹⁶

Bath or basin. A fragment of a large basin or bath was found at Phylakopi, belonging to an elliptical type with ledge-handles. The pleasant design on the interior consists of several fish, perhaps intended for dolphins, swimming round to the right. A wavy line runs round below the rim.¹⁷ The derivation from some fresco seems obvious.

F. POLYCHROME WARE: 'BLACK AND RED'

The pottery of this class from Phylakopi is largely contemporary with the ware of the preceding section. The term is one applied by the excavators to a group of 'Early Mycenaean' vases, characterized by painted designs in matt black on the light ground of the vase, the highlights in the designs being red or brown burnished circles, which in many cases form the bodies of flying birds.¹⁸ The juxtaposition of matt black designs and red burnish has already been noted

¹ *Phyl* pl. xvi. 13.

² e.g. *BSA* xliv, pl. xii. 3, 4; *Hesperia* vi. 554, fig. 10c.

³ *Phyl* pl. xvi. 1, 4.

⁴ Cf. *AJA* xl. 418, fig. 3. A bird on a jug from Asine is also probably derived from Melian patterns, *Asine* fig. 203, 2.

⁵ *Phyl* pl. xvi. 6; *BSA* xvii, pl. xiii. 234; cf. *BMC* i. A 577, 605i.

⁶ *Phyl* fig. 88, pl. xvi. 5, 7; *BSA* xvii, pl. xiii. 205.

⁷ *Phyl* pl. xvi. 3; xvii. 4, 5, 8, 27; xviii. 15.

⁸ Cf. C. W. Blegen, *Korakou* 24 and fig. 34.

⁹ *Phyl* pl. xvi. 11-21.

¹⁰ *Op. cit.* pl. xix. 3-5.

¹¹ *Op. cit.* pl. xxxiii. 17; Thera museum, Akr. H 36.

¹² *Op. cit.* pl. xxxiii. 11; *BMC* i. A 358.

¹³ *BCH* xlvi. 120, fig. 7c (wrongly restored with two handles).

¹⁴ *Phyl* pl. xiv. 2; cf. *PM* i. 560.

¹⁵ *Phyl* pl. xiv. 1.

¹⁶ *Chron* fig. 217; *BCH* xlvi. 131, fig. 21d; *CVA* Denmark, pl. 36, 3.

¹⁷ *Phyl* fig. 113.

¹⁸ Cf. *op. cit.* 118-23.

in connexion with some spouted bowls painted in the Rectilinear Style, but in the present class it is the burnished element which is subordinated to the matt black of the designs. The decorative elements are very largely those of the Naturalistic class; even such minor details of decoration as the 'bracket-pattern' occur on vases of both classes.¹ In one instance the painter has drawn on the decoration of the Curvilinear Class for his inspiration; I refer to a circular ornament (now red-burnished) surrounded by a spiral border.² The style is restricted to Melos but some pots were exported to Thera, Crete (Knossos), and Mycenae, and local pottery both in Thera and Mycenae was influenced.³

Jug. Of two types, the beaked variety is identical with that of the preceding section. The Temple Repositories of Knossos have furnished several characteristic Melian specimens; the design, confined to the upper part of the jug, consists of flying birds, disks, and spirals, the bodies of the birds and the disks being formed of red-burnished circles.⁴ Evans considered the syntax of this type of design to have been directly inspired by a circle and tangent scheme of decoration of M.M. I date, many examples of which have been furnished by the cemetery of Pachyammos.⁵ There seems to be a chronological argument against this theory, but one cannot wholly disregard the possibility that the Cretan style may have persisted long enough in Crete for such influence to have been possible, and it must be remembered that on East Cretan sites M.M. III ware follows directly after that of M.M. I. A fragment of an identical beaked jug was found in Thera, obviously an import from Melos, and fragments of locally made pottery there show that the potters copied the pronounced 'bulge' of the throat of Melian jugs.⁶

The second type of jug has a round neck and one handle from shoulder to rim. Two complete specimens were found at Phylakopi; one of them is painted with a round-bodied bird, the other has a very graceful tulip design and a loose spiral ornament round the neck; the latter detail is common on the jugs of the beaked type.⁷ A fragmentary, unpublished example in the National Museum at Athens has a trefoil neck and is decorated with similar birds.⁸ Perhaps also belonging to some jug type are several fragments, one showing a vertical foliate band as part of the decoration, the other the remains of a figure scene.⁹

G. OTHER MIDDLE CYCLADIC FABRICS

The pottery included in this section does not form a homogeneous class; in it have been gathered together examples of styles which fall outside the distinctive Cycladic classes discussed above.

1. *Pottery with Helladic connexions.* Many fragments of pithoi of Helladic type, with a relief decoration consisting of overlapping disks of clay, were found in Delos, Keos,

Bridge-spouted vase. There are at least two almost complete examples of bridge-spouted vessels. One of them has a basket-handle and is decorated with a round-bodied bird facing a vertical foliate design; the second is unpublished in the museum of the British School at Athens: it shows a similar bird together with a similar circular ornament as occurs on the beaked jugs.¹⁰

Spouted jar. This type is said in the excavation report to have been decorated in the 'Black and Red' style, but we are not told whether any of the sherds illustrated there come from such a jar.¹¹

Amphora. One complete example of the type with elliptical mouth and two side-handles was found at Phylakopi. Its loose, naturalistic spirals assign it to the present class, although there is the unusual use of red paint, perhaps in imitation of the polychrome M.M. III amphorae which are decorated with similar fantastic plant designs.¹²

Pithos. One fragment from a pithos shows a dolphin diving over a disk ornament, whilst on the left is a conventionalized tulip-flower such as is seen on one of the round-necked jugs; an intermediate stage in the conventionalization of this ornament is seen on a sherd where the flower is not wholly detached from the stem of the plant.¹³

Bath. Two fragments from different vessels show waterfowl depicted against a natural background; no doubt Evans was right when he suggested that these derived their subjects from contemporary frescoes.¹⁴ A fragmentary pot from Thera (tentatively restored as a jug) shows a polychrome type of decoration with a similar subject.¹⁵

Kythnos, Melos, Mykonos, Naxos, and Tenos.¹⁶ Such pithoi were popular over a long period of time, and therefore cannot be assigned to a particular phase of the Middle

¹ Cf. op. cit. pl. xxi. 8 and xvi. 5.

² Cf. op. cit. pl. xx. 7, 8 and xiv. 9.

³ See below, p. 39.

⁴ e.g. BMC i. A 360. ⁵ PM II. i. 185.

⁶ Thera museum, Akr. H 59; BCH xlvii. 131, figs. 21a, c.

⁷ Phyl. pl. xxi. 1, 4.

⁸ I am indebted to Mrs. Karouzou for permission to study this and other unpublished vases from Phylakopi.

⁹ Op. cit. pl. xx. 15, 16.

¹⁰ Op. cit. fig. 91.

¹¹ Op. cit. 119, type 6.

¹² Op. cit. fig. 94a, b. Cf. PM i, pl. vii (left).

¹³ Phyl. pl. xxi. 15; cf. the sherd pl. xx. 14.

¹⁴ Op. cit. figs. 114, 115; cf. PM iii. 115.

¹⁵ BCH xlvii. 140, fig. 28.

¹⁶ e.g. Phyl. pl. xxxiv. 12.

Cycladic Period; it is noteworthy, however, that they occurred on the Cycladic sites chiefly in conjunction with Minyan ware.

Fragments of bowls or cups with a polychrome scheme of decoration which seems to have been inspired by Mainland types such as occur at Mycenae, Korakou, Prosymna, Zygouries, and elsewhere have been found in Paros and Siphnos.¹ From Keos comes evidence of a similar style: part of a jug with matt-painted decoration in brown and black on buff clay, and fragments of a pithos with red stripes edged with black on a buff ground. The fragments from Paros are said to have been representative of the latest matt-painted ware from the site; together with evidence

incised decoration corresponding to a M.M. III type are represented by fragments from Keos and Melos.⁵

Large jugs with a cut-away neck and knobs on either side of the spout such as were current in Crete towards the close of the M.M. III period are represented by fragmentary and whole specimens from Delos, Melos, and Thera.⁶ Undecorated jugs with round neck and one handle from shoulder to rim, another Cretan type of the same period, were also found in Thera.⁷ The type of amphora with elliptical mouth is represented in the same island by fragments; I refer these to the late Middle Cycladic Period as they are decorated with white paint after the M.M. III manner. From the same island comes an imported tankard

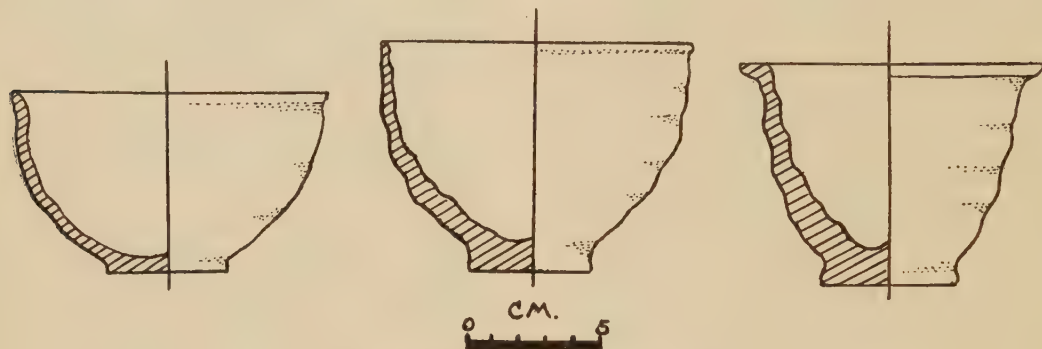


FIG. 3. MIDDLE CYCLADIC III CUPS FROM KEOS

from Mainland sites this indicates that such a polychrome style should be assigned to the closing phases of the Middle Cycladic period.

2. *Pottery with Cretan connexions.* FIG. 3 shows sections of three cups from Keos which are inspired by M.M. III types. They are locally made, but retain traces of a coating of black paint such as was used on cups in Crete. The third is fluted horizontally on both interior and exterior, and on all the string-marks on the base are very prominent.² From the same site and from Tenos come fragments of bridge-spouted jars. Imported fragments from jars of the same type were found in Keos and Melos; these bear traces of white designs on a dark ground.³ A few pots from Thera and Melos are decorated with the M.M. III 'trickle' pattern; two are teacups from the latter site, and another is a large pithos from Thera which would be taken for a Cretan jar but for the matt quality of the paint.⁴ Pithoi with bands of

covered with black paint on which are painted grasses in white.⁸

3. *Traditional Cycladic types.* In both the islands of Amorgos and Thera were found bottle-like vessels decorated with vertical plastic stripes, usually four in number; the type does not seem to have occurred elsewhere.⁹ The pierced lugs in lieu of handles suggest an evolution from some Early Bronze Age type; these examples, however, were undoubtedly made at a much later date. A clay goblet on a short stem from Thera may also have evolved from a much earlier type. The only contemporary parallels for this are in other materials.¹⁰

4. *Cypriot imports.* Two fragments of Cypriot 'milk-bowls' of the White Slip I class were found in Melos and Thera, and probably date to the very end of the M.C. III period.¹¹

H. CHRONOLOGY

The only excavated site for which we have as yet stratigraphical details is Phylakopi; the chronological scheme here advanced is, therefore, chiefly based on the material from this site.

¹ *AM* xlii, figs. 72, 73; cf. C. W. Blegen, *Prosymna* i, pl. iv. 380, 381; *Korakou* fig. 40.

² Cf. *PM* i, fig. 343b; *Archaeology of Crete* pl. xxvii.

³ Fragments from Melos in *AMO*.

⁴ *BSA* xvii, pl. xiii. 88, 94; for the pithos cf. *Gournia* pl. vi. 43.

⁵ e.g. *Phyl* pl. xxxiv. 3.

⁶ e.g. *EADelos* xv, pl. i. 7.

⁷ For the Minoan prototypes cf. *BSA* ix, fig. 26.

⁸ *BCH* xlv. 120, fig. 6a; Thera museum, Ak. O 5.

⁹ *Op. cit.* 128, fig. 17a-c; *CVA* Denmark, pl. 36, 8.

¹⁰ See below, p. 39.

¹¹ *Phyl* fig. 148; *FLMV* pl. xii. 80 from Therasia.

It is unfortunate that in the excavation reports few details are given with regard to find-groups, and the stratification itself is noted only in the most general way.¹

As regards the pottery of the Rectilinear Style (Section A), of which the bulk was found in the later deposits of the First City and the early deposits of the Second, it was observed that some of the light-on-dark class derived its patterns from E.M. III and M.M. I ware; on the Mainland this technique is but dimly reflected in some E.H. III ware. On the other hand, much of the matt dark-on-light class seems parallel in types and decoration to the matt-painted ware of the Middle Helladic period. At Phylakopi this kind of pottery is found in deposits with M.M. I ware and some Grey Minyan pottery.² The evidence from the Mainland, and particularly from the recently excavated site of Lerna, where seven strata were able to be distinguished in places for the Middle Helladic period, seems to indicate that matt-painted ware was most commonly found in later phases of the period. With regard to Lerna itself, it has been stated that such ware 'is common in the later phases, but is rare, if not wholly absent, in the earliest'.³ Assuming that the first occurrence of Minyan ware at Phylakopi does not greatly post-date that on the Mainland, we must conclude that in part, at least, the matt-painted ware of Phylakopi ante-dates that on the Mainland, in which case the latter, which shows a parallel form of decoration, must be dependent upon it. It is noteworthy that Blegen inclines to this view.⁴ As regards the process of transmission, the island of Aegina seems to have been one of the intermediaries. It is on vases from this island that we see that many of the Cycladic characteristics, almost wholly lost on Mainland examples, have been preserved. On two vases from Aegina, for example, the Cycladic cross-hatched patterns occur, and also a reminiscence of the 'circle and tangent' scheme of decoration; an example from Eutresis is of the same kind.⁵ But on other vases from Aegina and the Mainland the coherence of the Cycladic compositions is lost; this is clearly shown on some Mainland pithoi where the decorative field is divided up vertically, incorporating circles in a very loose design.⁶ While many of the prototypes for the Cycladic light-on-dark class are E.M. III, but the dark-on-light class must at least be partly contemporary with the Helladic ware it inspired, we should perhaps compromise and term the whole of the Rectilinear Class 'late Early Cycladic to Middle Cycladic I'.⁷ This is a convenient term, for, as was noted above, there is no distinct break in the ceramic development between the First and Second Cities of Phylakopi, but rather the period is to be thought of as one of transition.

The Minyan pottery (Section B) seems to have occurred in its largest quantities in early deposits of the Second City (i.e. in M.C. I), although it continued in use throughout that City to a lesser degree and survived until the inauguration of Late Cycladic I, just as it continued to be made on the Mainland until Mycenaean times.⁸ That such ware was well known and accepted in the south Aegean area before the close of the M.C. I period is confirmed by the fact that in Crete two vases were made towards the close of the M.M. I period which copied Minyan types.⁹

The Burnished pottery (Section C) continued to be made throughout the Second City of Phylakopi. The types paralleled in the Minyan class are probably contemporary with them, but to later phases we must assign those pots whose white-painted designs are dependent on M.M. III models. The bowl with loop-handle (p. 17), a uniquely Cycladic type, was probably introduced in the middle phase of the Second City, for in its perfected state, where the handle

¹ Cf. *Phyl* 162-3.

² *BSA* xvii. 17.

sherd from Ayia Irini in Keos.

³ *Hesperia* xxiii. 29.

⁴ *BSA* xlv. 22.

⁷ Cf. Furumark on the chronology of this ware, *MP*

⁵ G. Welter, *Aigina* fig. 19 (cf. *AM* xlii, fig. 68); *Eutresis* fig. 206, 4.

217 n. 1.

⁸ *BSA* xvii. 17-18.

⁶ Cf. *AE* 1895, pl. 10, 1; *Korakou* fig. 28. Also a local

⁹ *BSA* xl, pl. xivm (Palaikastro); *PM* iv. i, pl. xxviii c, 1.

is attached smoothly on to the body, it is decorated in the Naturalistic manner (see p. 20), whereas a more rudimentary form (represented in Keos) should probably be assigned to an earlier, i.e. M.C. II, phase.

Hard on the heels of the matt-painted ware with Rectilinear patterns appears that painted in the Curvilinear Style (Section D). At Phylakopi it occurs in deposits with true Kamares ware (on which it is partially dependent) and may therefore be termed 'Middle Cycladic II'.¹

To the later phases of the Second City, that of the pillar-rooms and their attendant frescoes, should be assigned the Naturalistic and 'Black and Red' styles (Sections E and F), which we may term 'Middle Cycladic III'; some of the pottery copying Minoan types in Section G may also be considered as belonging to the same period.² As between the First and Second Cities, so between the Second and Third we observe a period of transition. Already in the very latest deposits of the Second City are some fragments of 'imported Mycenaean' ware (i.e. imported Minoan and Mycenaean), which belong to the beginning of the Late Bronze Age, while some of the M.C. III 'Black and Red' ware is found sporadically in the earliest deposits of the Third City. A correlation of the final stage of the Middle Bronze Age in Crete, Phylakopi, and Mycenae is shown by the occurrence of such 'Black and Red' ware in the Temple Repositories at Knossos and the Shaft-Graves (in the Second Circle) at Mycenae.

THE CYCLADIC POTTERY OF THE LATE BRONZE AGE

In contrast to the method employed for the pottery of the Middle Bronze Age, where the analysis depended on the sequence of styles at Phylakopi, the material here is classified site by site, for not only is the bulk of it from sites other than Phylakopi greater than in the preceding period, but also that city gradually recedes from the position where she was foremost in creating a distinctive Cycladic Style.

A. LOCAL CYCLADIC I-II POTTERY

1. *Phylakopi*. Little could be added to the rather too detailed analysis of this pottery made by Furumark.³ The locally made pottery most typical of the earliest deposits in the Third City is the 'Red and Black' and monochrome ware, of which some early examples were found in the very latest deposits of the Second City. The first class is so called from the predominant use of a red or reddish-brown semi-lustrous paint, details being picked out in matt black.⁴ As the red paint has very little lustre of its own, many of the pots were burnished over the whole surface after its application.⁵ This was done no doubt to imitate the brilliant effect of the Minoan glaze-paint and slip, for both these classes are dependent on L.M. I-II models. The monochrome ware can be divided into two classes, one in which the designs are carried out rather coarsely, with little detail, and the other in which the painting is of a much finer character, and the designs very similar on the whole to those of the 'Red and Black' class. On some cups there is a lavish use of white paint.

Jug. One type of jug is of the traditional beaked variety, but it is only represented in a transitional style which shows the struggle for predominance between the red and black paint.⁶ A new type of jug, a sturdy little pot with a cut-away neck, now appears; it has parallels in M.M. IIIB ware and is related to a Mycenaean I jug (F. type 135) which seems to have outlived it.⁷ The crocus-flower, grass-frond, and wavy hatched band used on these jugs are directly copied from Minoan pottery.⁸ The polychrome technique is usually employed on these jugs, although an unpublished example in the Plaka museum, Melos, has a spiral design in the second monochrome manner. The most common type, however, is a broad bridge-spouted jug (a Minoan type copied by Mycenaean II potters) usually decorated with the L.M. IA connected spiral band, often with floral enrichments and additions in white after the Minoan manner.⁹ The coarse wavy line towards the base is derived from the Minoan arcade pattern as is seen clearly on a bridge-spouted jar.¹⁰ Another bridge-spouted type, with

¹ *Phyl* 260. ² *Op. cit.* 262. ³ *OpArch* vi. 192 ff.

⁴ *Phyl* 129. This is not to be confused with the 'Black and Red' of the preceding period.

⁵ A similar burnishing was given to some early Mycenaean jugs.

⁶ *Op. cit.* pl. xxiii. 2; *BSA* xvii, pl. viii. 191.

⁷ e.g. *Phyl* pl. xxiii. 1, 3, 4, 6; *BSA* xvii, pl. iii. 142 (transitional).

⁸ Cf. Iraklion museum no. 4585 (Palaikastro).

⁹ *Phyl* pl. xxv. 4-6. Note the use of reservation in place of the use of white paint, pl. xxviii. 104, 11.

¹⁰ i.e. F. pattern 66: 1; cf. *BSA* xvii, pl. viii. 153.

either one or three handles, illustrates the adoption of the piriform type which originated in M.M. IIIB ceramics; two examples of jugs are modelled on a rare Minoan type with a double rim, such as was found at Gournia.¹

Bridge-spouted jar. Many examples of this type were found, the majority of them belonging to a somewhat ponderous variety, similar in profile to the first type of bridge-spouted jug, and decorated with spiral bands.² Fragments of others show floral patterns, and one example is not only decorated with the Minoan grass-frond, but also preserves the convention of the prototype by which the grasses are inclined slightly to the right as if blown by a breeze.³ A second variety is piriform, and similarly decorated with spiral, ripple, or ivy patterns, designs again taken directly from L.M. I ware.⁴

Pithoid jar. One complete specimen of a large type with three horizontal handles conveniently illustrates almost the complete repertory of the polychrome painter's designs.⁵

Amphora. An unpublished jar in the Plaka Museum is of the L.M. I-II type with several sets of vertical handles, and is decorated with grass-fronds. The type with elliptical mouth also occurs.⁶

Pedestal vase. The precise purpose of this type is conjectural; the centre of the vase is either hollow, or has a perforated boss. The majority of the examples were found in the latest deposits of the Second City, but one was furnished by a chamber-tomb at Mycenae (the companion piece of the amphora mentioned above). These again are a direct copy of a Minoan type, but are often more decorative than their models.⁷ There are several examples in the monochrome technique, but the most effective of all is painted in the polychrome manner, its design representing a daisy-like flower.⁸

Bath or basin. The type is the roughly elliptical one of the preceding period. These were decorated in polychrome technique with spiral patterns and daisies, in the first monochrome technique with spirals with grass-frond or ivy-tendrils additions, and in the second monochrome technique with floral designs or octopus motifs such as occurred on imported L.M. IB ware.⁹

Strainer. This again is a L.M. IA type; in Melos it was decorated in the polychrome manner.¹⁰

Ladle. A fragmentary example in polychrome technique is decorated with a daisy-flower such as appears on the basins and pedestal-vases.¹¹

Cup. Of several types at this period, a complete example in polychrome technique shows the final decadence of the type which was so popular in the M.C. III period.¹² A new type is the so-called 'Vaphio' one, but without the raised belt of the metal prototype; the latter feature, however, is often indicated by a stripe of paint round the middle of the cup; the decoration consists of foliate bands, ripple ornament, or hatched bands.¹³ One of these cups has its base decorated with a spiral like a L.H. I cup at Mycenae.¹⁴ A third type of Minoan origin, represented in Melos by one complete example, is a small rimmed cup decorated with ripple pattern.¹⁵

The type of cup which occurred most commonly was of hemispherical shape, and it has three variants. The first variant has no distinct rim, and is decorated in the polychrome or first monochrome technique with spiral, foliate, or zoned decoration.¹⁶ Lines, crosses, and spirals decorate the bases of many of these cups; the convention, used by painters of L.H. II alabaster, is a Minoan one and seems to have been used first in the M.M. III period on light-on-dark ware.¹⁷ The second variant with a slightly defined rim is decorated in either the polychrome or second monochrome technique; the designs on these often suffer from the overcrowding of detail.¹⁸ The third variant with a distinct rim closely copies a L.M. IA type.¹⁹ It is most often decorated in the first monochrome technique with a running-spiral pattern, but there are examples in the polychrome style and sometimes the spirals are filled in with white, possibly in imitation of some spiral-patterned L.M. II amphorae.²⁰

Spouted bowl. This traditional type has now atrophied into a rather shapeless vessel in which the spout is merely pinched out of the wall and a stud takes the place of the handle. There are several examples in the polychrome technique; the interior has a red wash, as have some of the cups.²¹

Ring-handled bowl. One unique specimen was found which imitates the shape of the Minoan metal bowl, and is decorated with spirals and bands in the first monochrome technique, the details of the metal prototype being rendered by clay studs on the handle and notching of the rim.²²

Rhyton. Several specimens were found of the conical L.M. I type; they are decorated in each of the three techniques.²³ Several vessels with a concave profile and an outlet at the base may have been used as rhyta; they are decorated with grasses in the polychrome technique, and

¹ Cf. *PM* II, ii, fig. 253; e.g. *Phyl* pl. xxv. 9; xxvii. 8, 9.

² *Phyl* pl. xxv. 1; *BSA* xvii, pl. iii. 87.

³ *BSA* xvii, pl. viii. 153; cf. the Minoan gem *PM* i, fig. 519.

⁴ e.g. *Phyl* pl. xxv. 2.

⁵ *BSA* xvii, pl. ix. 182.

⁶ *Phyl* pl. xxvii. 2; A. J. B. Wace, *Chamber Tombs at Mycenae* pl. xlii. 5.

⁷ Cf. *PM* II, ii, fig. 349c, m, from the Gypsades Well.

⁸ e.g. *BSA* xvii, pl. viii. 91; *Phyl* fig. 110.

⁹ *Phyl* pl. xix. 1, 2; xxx. 2-6, 9a-c.

¹⁰ Op. cit. pl. xxiv. 1-3; for the type cf. *Gournia* pl. vii. 21.

¹¹ *Phyl* pl. xxv. 7.

¹² Op. cit. pl. xxix. 3.

¹³ e.g. op. cit. pl. xxv. 8, 10, 12; *BSA* xvii, pl. viii. 48, 127.

¹⁴ Cf. *Chamber Tombs at Mycenae* pl. xli. 35.

¹⁵ *Phyl* pl. xxv. 11; cf. *BMC* i. A 632 (Zakro).

¹⁶ e.g. *Phyl* pl. xxvi. 5-12; *BSA* xvii, pl. x. 83, 84, 186.

¹⁷ Cf. *BMC* i. A613-14 (Dictaeon Cave).

¹⁸ e.g. *Phyl* pl. xxvi. 14-27; *BSA* xvii, pl. xiv. 21-34.

¹⁹ Cf. *PM* II, ii, figs. 282b, 283 (Knossos).

²⁰ e.g. *Phyl* pl. xxvi. 1, 3, 4; *BSA* xvii, pl. x. 141.

²¹ *BSA* xvii, pl. x. 86, 103, 187, 190, &c.

²² *Phyl* pl. xxvii. 3. Cf. *PM* II, ii, fig. 407d.

²³ e.g. *CVA* Denmark, pl. 35, 14.

closely approximate to a L.M. I type, both in form and decoration.¹

Pithos. Several fragments of pithoi with relief decoration were found. Their incised and spiral patterns conform to the L.M. I-II type, although they are usually less complex than their prototypes.²

Tub. Part of a large, flat-bottomed vessel with some perforations in the sides was found, its purpose unknown. It is decorated pleasantly in the polychrome technique with crocus-flowers and spirals like some of the jugs, and belongs to the beginning of the period.³

2. Thera. Although the pottery of this period, as of the preceding one, comes from several sites in Thera and one in Therasia, it has not seemed convenient to divide up the material according to its exact provenance. It would in fact be impossible to do so, as there are many pots and fragments in the Thera museum which are not marked with any indication of their find-spot. Most of the material seems to have come from the sites of Kamara, Akrotiri, and Therasia, and forms a fairly homogeneous collection.

In this connexion mention must be made of Bent's description of some of the pottery which he saw from Therasia, for he seems to have been slightly misled.⁴ He says 'the remains of Akroteri are not so old, iron instruments were found therein, and pottery of a much more advanced age resembling that found by Dr. Schliemann at Hissarlik than those things which came from Antiparos or Therasia. Furthermore, the remains of the village of Akroteri are not so deeply buried as those at Therasia, being little more than twenty feet below the surface.' But the 'Early Cycladic' pottery and iron tools are not to be found now; a very few pots with suspension lugs belong to a much later period. Fouqué expressly states that the pottery from both sites was of the same kind, and the depth at which the settlements were found is no indication of their respective ages. We have, moreover, sufficient evidence to show that both sites were flourishing during the late Middle Cycladic and early Late Cycladic periods.

As regards the technique of the locally made pottery, the chief medium employed was a brownish-red or black paint, little if at all lustrous. On some vases white paint has been added after the L.M. IA manner. On the whole the pottery seems to have been inspired by contemporary Minoan types, but some of it has a distinctly Melian flavour about it, which suggests that there was a certain amount of influence exerted from the larger island.

Bridge-spouted jug. Two fragments of this type, decorated with foliate and spiral patterns in brown paint, are clearly influenced by contemporary Melian ware, but the execution of the designs is very careless.⁵ One complete specimen furnished with a spout rather more uplifted than that of the

rest is of particular interest as its main design, consisting of a double-stemmed, connected ivy pattern, is paralleled only on a L.H. II goblet from Lachish.⁶

Bridge-spouted jar. Many examples of this type have been found, but not all of them published.⁷ The majority of them have a well-defined foot, and some a good piriform shape; there are usually two horizontal side-handles. One example is larger than most, and is decorated with three zones of ripple ornament.⁸ Three unpublished examples in the Thera museum are decorated with two zones of the same ornament, their heights ranging from 12.5 to 13.5 cm. One is a particularly fine vase, with white additions on the olive-black paint; the other two are decorated with a redder paint in a much less careful way.⁹ Another vase with a fine shape has an unusual decoration in the upper zone which recalls the pattern on a cup from Mirabello.¹⁰ A slimmer specimen is given a polychrome effect by black bands round the middle of the body and base, together with red and white additions.¹¹

Pithoid jar. One example with three horizontal handles set near the rim is decorated rather carelessly with a linked spiral pattern and loop filling-ornament such as is characteristic of contemporary Melian ware.¹²

Amphora. Many fragments and complete examples of the type with elliptical mouth were found.¹³ These are usually plain except for brown bands round the base of the neck and handles, and are often of large size. There are only a few exceptions to this scheme of decoration; one, for example, has a linked spiral band round the shoulder, another traces of a palm-like ornament on either side. An unpublished example was once decorated with ripple pattern on the shoulder; another has a coarse grass pattern as on a Melian example.¹⁴

Bath. One complete example was found, of the same elliptical shape as the examples from Phylakopi. On the interior is a coarse grass pattern.¹⁵

Strainer. An almost complete example of the L.M. I type has two vertical and two horizontal handles on the shoulder; the decoration consists of coarse foliate and crocus patterns in brown with details added in white. Another, fragmentary vessel belongs to another type which incorporates two vases in one.¹⁶ The decoration, which is much too careless to merit such description, consists of a series of goats(?) in black paint with accessory ornament of red-brown crocuses. Possibly the combination of the two colours of paint indicates an attempt to copy the polychromy of some Melian ware.

Cup. Although there were many examples of the plain, shallow variety common to most Minoan and Mycenaean sites, only two decorated specimens were found. Both are

¹ e.g. *Phyl* pl. xix. 9, 10. Cf. *PM* iii, fig. 186a, b.

² *Phyl* pl. xxxiv. 6, 8, 10.

³ *Op. cit.* pl. xxiii. 7.

⁴ Bent, *op. cit.* 106, 150.

⁵ *BCH* xlvi. 135, figs. 24a, b.

⁶ *Chron* fig. 256 (Kamara); cf. *MPL* pl. xiv. 1.

⁷ e.g. *BCH* xlvi. 121, figs. 8a-c, 135, fig. 24c, 136, fig. 25a, d.

⁸ H. von Gaertringen and M. Wilski, *Thera* iii, fig. 31 (Exomiti).

⁹ Thera museum, Ak. H 14, 10, 13.

¹⁰ Ak. H 9/12; cf. *BMC* i. A 640.

¹¹ Ak. H 11.

¹² *FLMV* fig. 8 (Mesavouno).

¹³ *BCH* xlvi. 119-20, figs. 4-6.

¹⁴ Ak. A 17.

¹⁵ *Op. cit.* 115, fig. 1.

¹⁶ *Thera* iii, fig. 32d (Kamara); *BCH* xlvi. 124, fig. 12.

of teacup shape; one of them has a linked spiral pattern with white additions, being a very close copy of a L.M. IA type; the other has a more Helladic look about it, but the interior is painted red after the Minoan fashion and has a painted cross on the base like the contemporary Melian cups.¹

Rhyton. One fragmentary example is of the tapering L.M. I type and is decorated with ripple pattern.²

Cylindrical vessel. Two examples were found of this unique but somewhat primitive type with small ledge-handles. One is plain, but the other has a foliate pattern and the loop filling-ornament of the spiral band.³

Stirrup-jar. Fragments of two stirrup-jars of domestic type were found. One is decorated with crocus-flowers, and the other has arrow-like motifs in the shoulder zone.⁴

Pithos. Two types of pithos were current in Thera; the first, of which there are examples in the Thera museum, is tub-like and supplied with two ledge-handles and the decoration consists of the usual connected spiral band; in

one instance the dots in the interspaces seem to be a degeneration of the former floral filling.⁵ There are two decorated examples of another type which narrows to the base and has an outlet near the base, as on an example from Gournia.⁶ The painted decoration, as distinct from the horizontal raised bands round the body, consists of what appears to be a variant of the connected spiral pattern, here applied vertically. Such a vase could not have stood unsupported, and may well have been held in position by such buttresses as those in the 'Oil Merchant's House' at Mycenae.⁷

3. *Keos.* Two pieces of local pottery dating to the period under discussion may be mentioned.

Cup. A fragment of a 'Vaphio' cup is painted with a ripple pattern in brown. An unusual feature is a series of white spots on the rim. A second sherd, belonging to a larger cup, is also decorated with ripple pattern and zones of spots; this may have belonged to a goblet of a type found at Mirabello.⁸

B. IMPORTED LATE MINOAN I-II WARE

Small quantities of this ware have been found in Keos, Naxos, Delos, and Thera, but far greater quantities at Phylakopi in Melos. These proportions are not wholly unexpected in view of the fact that Melos was in closest contact of all with Crete during the latest phases of the preceding period.

1. *Keos.* Only three sherds were found on the site of Ayia Irini of this pottery, and all date to L.M. I. They are important, however, as they indicate that the influence exerted by Crete in the M.C. III period continues into the present one.

Cup. One fragment of a cup of 'Vaphio' type (a form copied locally) has a good ripple pattern on the exterior.

Spouted bowl (?). A sherd painted with grass-pattern in good olive-black paint and coated on the interior with a streaky black wash (FIG. 4, no. 7) is similar to many found at Phylakopi.⁹

Rhyton. The third sherd is of very fine fabric, decorated on the exterior with a spotted pattern (FIG. 4, no. 6). The profile and unslipped interior suggests a small closed shape, possibly that of a rhyton such as one with a mock stone pattern from Palaikastro.¹⁰

2. *Naxos.* In the museum of Naxia there appeared to be only one sherd from Kondoleon's excavations from Grotta which could be considered without doubt to be Minoan, but there may have been others, for not all the material was accessible.

Amphora. The sherd belongs probably to a large amphora with vertical handles, decorated with a mock stone pattern. An unusual feature is impressed cockle-shell decoration on the lower part of the handles. Similar relief patterns are found on a M.M. IIIB sherd from Mallia, and were still popular in metalwork in the L.M. II period.¹¹

3. *Delos.* One whole pot and a fragment of a stirrup-jar may be assigned to the L.M. IA and II periods respectively.

Bridge-spouted jar. This is a specimen found in the so-called 'Hyperborean' tomb; most of the paint has gone.¹²

Stirrup-jar. The pattern of tri-curved arches on the sherd from this vessel is closely paralleled on a L.M. IIB jar from Knossos and on contemporary frescoes.¹³

4. *Thera.* Very little imported Minoan pottery was found in Thera.¹⁴

Jar (?). Two sherds probably belonging to jars are decorated with a naturalistic ornament commonly used in the early L.M. I period by East Cretan painters.¹⁵

Cup. Several unpublished cup fragments are in the Thera museum; all are of L.M. I type. Two are from

¹ *FLMV* fig. 7; Thera museum, Akr. H 47.

² Thera museum, no number.

³ *BCH* xlvi. 126, figs. 14a, b.

⁴ *Op. cit.* 120, fig. 6; 122, fig. 10.

⁵ *Thera* iii, fig. 32c (Kamara); cf. *PM* II. ii, fig. 349e.

⁶ *Thera* iii, fig. 32a, b (Kamara); cf. *Gournia* pl. i. 25.

⁷ *ILN* 1 Nov. 1952, fig. 14.

⁸ *BMC* i. A 644.

⁹ *BSA* xvii, pl. xiv. 4, 5.

¹⁰ *UOP* fig. 24.

¹¹ *Archaeology in Greece* 1953, 168; *PM* II. ii, fig. 400.

¹² *EADélos* xv, pl. i. 6.

¹³ *Op. cit.* pl. liii. 16; cf. *PM* II. ii, fig. 239a, III, fig. 194.

¹⁴ For a possible reason see below, p. 38.

¹⁵ e.g. *BMC* i. A 695; cf. *UOP* pl. xvd.

'Vaphio' cups, one of them having a raised 'belt' in imitation of its metal prototype, and the third sherd comes from an 'in-and-out' bowl decorated with bands and cross-hatching in red paint.¹

5. *Unknown provenance.* Unpublished is the large fragment of a shallow bowl decorated with the same spiral ornament as the jar from Thera above.²

tinguishable, the colour of clay and paint must not form the only criterion of judgement, as the series of rhyta from Palaikastro aptly show.⁵ Fragments painted in the marine style too may easily be mistaken, although it should be remembered that the Minoan schemes of design are generally more original in their use of decorative elements than the Mycenaean. When, however, controversy rages over the origin of complete pots found in Egypt and else-

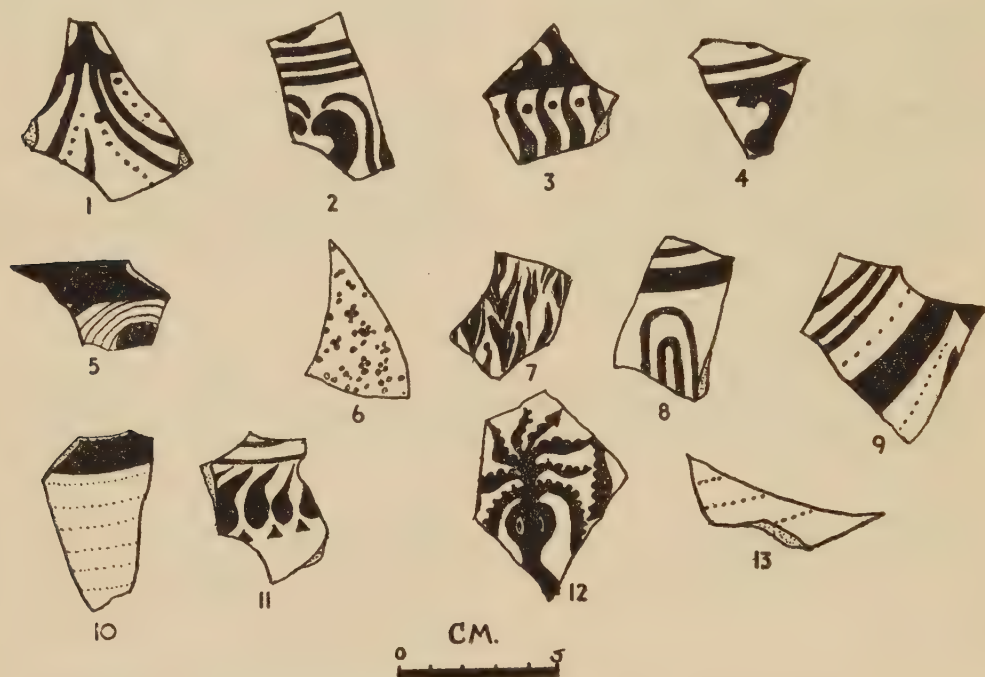


FIG. 4. LATE BRONZE AGE POTTERY FROM KEOS (NOS. 1-11, 13) AND MELOS (NO. 12)

6. *Melos.* A great quantity of Minoan ware was found at Phylakopi but most of it is unpublished. In the first excavation report it was termed 'imported Mycenaean' ware together with true Mycenaean pottery, as no distinction between the two was possible at the time.³ In the second report much of it was recognized as being Minoan, but with it was included some Mycenaean.⁴ It is unfortunate that most of the material is very fragmentary, with the result that, while the designs can generally be reconstructed, the types to which they belong are not always so easily recognizable. Such a difficulty does not so often arise when Mycenaean pottery is being considered, owing to the rather stereotyped nature of that ware. In some cases, too, it has been difficult to decide whether a sherd is Minoan or Mycenaean. Although the fabrics are often easily dis-

tinguishable, the colour of clay and paint must not form the only criterion of judgement, as the series of rhyta from Palaikastro aptly show.⁵

Amphora. No complete specimen remains, but two sherds, one with a connected-lobe design and the other with a mock stone pattern, are both paralleled closely by L.M. IA jars from Mochlos.⁶ A large fragment belongs to an amphora of similar date with a collar; another, probably of slightly later date, has a reserved wavy line round the neck.⁷ Some sherds belong to ripple-painted jars, whilst others are painted in marine style.⁸ A more unusual piece has zones of sacral knots, another zigzag ornament and marine designs, and a third shield motifs.⁹

Bridge-spouted jar. An unpublished fragment with a connected spiral pattern and zones of spots illustrates the kind

¹ Akr. 23/13, 04, 05; cf. UOP fig. 14.

² MCAC, CC. 20.

³ Phyl 145-8.

⁴ BSA xvii, especially fig. 2.

⁵ e.g. UOP pl. xix a.

⁶ Phyl pl. xxxi. 12, AMO AE. 581.8; cf. AntCret ii, pl. xiii.

⁷ MCAC, PP. 180, 191.

⁸ MCAC, PP. 182, 183, 193, 220, 232.

⁹ Phyl pl. xxxi. 2 (photographed upside-down), 8; BSA xvii, pl. xiv. 9.

of decoration which was imitated locally.¹ Another has a vertical hatched-lobe pattern such as Mainland painters copied, and an attractive piece has the star-and-bubble pattern of the Palaikastro rhyta.²

Jug. Some fragments of L.M. IB or II style probably belonged to jugs or ewers, as they are thin in section and not painted on the interior. A published fragment of a very fine vase is painted in the marine style; the foliate pattern on the handle (paralleled in contemporary metalwork) is also used on another handle which may have belonged to a jug.³ An almost complete jug with floral pendant pattern (F. pattern 38: 1) is probably Minoan; the painting on one side is very inexact, and this is a characteristic which goes hand in hand with the Minoan individuality and spontaneity of design.⁴ Other fragments with the same design probably also belong to jugs; on the Mainland this pattern was used to decorate large rather than small pots such as these.⁵ Some sherds of L.M. IB style have octopus motifs (FIG. 4, no. 12) such as were copied locally.⁶ Finally, I should assign another complete vase to Minoan manufacture; this is a large, bridge-spouted vase, of which both the shape and the pattern on the neck are paralleled by a jug from Sklavokampos in Crete.⁷ The design on the body, consisting of argonauts and bubbles, is thoroughly Minoan

in conception, while the arched pattern round the base is one which often decorates Minoan vases.⁸

Cup. Several unpublished fragments belong to cups of 'Vaphio' type, with ripple designs; the paint varies from a rich brown to red, and shades off delicately into the colour of the slip.⁹ Sherds from cups of hemispherical shape, decorated with lines of dots, ivy patterns, or 'running-dog' ornament, illustrate the class which the local potters copied.¹⁰

Bowl. Three fragments, probably belonging to spouted bowls, have a slightly pronounced foot and are slipped on the interior; they are decorated respectively with a scale pattern, conventionalized ivy leaves, and argonauts.¹¹

Rhyton. An unpublished fragment belonging to a rhyton of conical shape is decorated in the marine style.¹²

Alabastra. Probably belonging to alabastra are several published fragments. One, assigned to this type by Evans, is decorated with a figure-of-eight shield and conventionalized ivy leaves, with sacral knots.¹³ Another has an ivy pattern, a second clumps of stylized papyrus flowers, and a third small tailed spirals painted in the L.M. II style.¹⁴ An almost complete example with ivy, rosettes, and rock-work is almost certainly Minoan.¹⁵

C. IMPORTED LATE MINOAN III WARE

As far as our evidence goes at the moment, the imported ware of this style has been furnished only by Amorgos, Kimolos, and Melos.

1. *Amorgos.* A kylix with a banded stem attributed to Amorgos has a bucranium between stags' heads on one side of the bowl and a spiral ornament on the other. Possibly this kylix and two fragmentary specimens from Melos belonged to the same figure style as a published example attributed to Crete.¹⁶

2. *Kimolos.* A sherd from the site of Ellinika comes from a large vessel, possibly a krater. The decoration which remains consists of most of the head and part of the body and wing of a bird. Though there seems to be no exact parallel for this type of bird, the outlining of the body is a Minoan trait.¹⁷

3. *Melos.* Most of the pottery of this class consists of kylix fragments.

Kylix. Three unpublished fragments are decorated with variants of the Mycenaean III flower (F. pattern 18), a

form of the motif which often appears on kylikes from Crete.¹⁸ A fourth sherd with sets of horizontal lines arranged in triangular formation is painted solidly on the interior after the Minoan manner.¹⁹ The fabric of all four sherds is good. Two other sherds with large handles are decorated with what appears to be goats' heads.²⁰

* *Bowl.* A sherd painted with a triangular hatched figure, fringed on one side, is closely paralleled by the decoration of a bowl from Vrokastro which dates to the end of the period.²¹

Jar. Possibly belonging to a stirrup-jar is a sherd painted in Minoan rather than Mycenaean manner with an octopus or octopus-tentacle motif.²²

Rhyton. A sherd belonging to a conical rhyton is painted with a dotted scale pattern and hatched zones. These decorative elements appear together on a pyxis from Palaikastro.²³

¹ MCAC, PP. 206; cf. the local sherd PP. 145.

² MCAC, PP. 221; sherd in AMO.

³ *Phyl* pl. xxxi. 1; sherd in AMO.

⁴ *BSA* xvii, pl. xi. 18.

⁵ e.g. *CVA* Gt. Britain, pl. 481, 40.

⁶ In AMO. I am indebted to the Keeper of the Ashmolean Museum for permission to reproduce one of these sherds.

⁷ *BSA* xvii, pl. xi. 140; cf. *AE* 1939-41, pl. 2, 2.

⁸ Cf. *UOP* fig. 32.

⁹ e.g. MCAC, PP. 189, 213.

¹⁰ e.g. *Phyl* pl. xxxi. 10, 11, 14; AMO, AE. 526.

¹¹ MCAC, PP. 187, 230.

¹² In AMO.

¹³ *Phyl* pl. xxxi. 5.

¹⁴ Loc. cit. 3, 9; *BSA* xvii, pl. xiv. 1.

¹⁵ *Phyl* fig. 123.

¹⁶ *Cat. Mus. Fine Arts, Boston* pl. v. 74; cf. *BMC* i. A 719.

¹⁷ Cf. *UOP* fig. 77.

¹⁸ MCAC, PP. 323, 327, 356; cf. E. H. Hall, *Vrokastro* fig. 49g.

¹⁹ MCAC, PP. 240.

²⁰ In AMO.

²¹ MCAC, PP. 241; cf. *Vrokastro* pl. xxix. 1 and fig. 77.

²² *Phyl* pl. xxxii. 2; cf. *UOP* fig. 92.

²³ MCAC, PP. 359; cf. *UOP* fig. 79.

D. IMPORTED MYCENAEAN I-II WARE

The bulk of this class of pottery found in the Cyclades comes from Melos and Naxos, but a certain amount also from Keos and Delos, and one sherd from Kythnos. To judge from parallels on the Mainland, one would say that it was manufactured in various centres in the south of Greece.

1. *Kythnos*. The base of a 'Vaphio' cup was found on the site of Ayia Irini.

2. *Delos*. All the pottery of this class has been found by excavators in the area of the Temenos.



FIG. 5. MYCENAEAN JUG FROM KEOS

Cup. Sherds of 'Vaphio' cups with connected spiral pattern (F. pattern 46: 29) and a teacup with a similar pattern (F. pattern 46: 12) were found near the Artemision.¹

Kylix. One fragment in the Delos museum illustrates the early variety decorated with a solid wavy band from the rim.

Bowl. Also in the museum is a sherd of a shallow bowl decorated with a stipple pattern in black paint.

Ewer. A fragment of an ewer in the same museum is of Mycenaean II style; the paint is a dark red.

3. *Keos*. Most of the following sherds were found either on the surface of the Ayia Irini site, or in the eroded sides not more than 0.5 m. down. The material is very fragmentary, but the decoration generally distinct.

Cup. In the museum housed in the Demarcheion of Kea are two sherds from 'Vaphio' cups, one with the common Mycenaean I pattern of connected spiral and spots (F. pattern 46: 29) and the other with a less frequently found design.² Two fragments of 'teacups' came to light on the

site, both of them decorated with spiral patterns (F. pattern 46: 9/12); one is shown on FIG. 4, no. 5.

Jug. An early Mycenaean type of squat jug is decorated with a streamer design (FIG. 5). The shape is not a common one at this period, but is represented at Prosymna, Mycenae, and Korakou.³ Probably belonging to ewers of Mycenaean IIA style are several fragments with decoration in zones (FIG. 4, nos. 2, 3, 4, 11). The first, with rather an unusual pattern, is paralleled by a sherd from Athens.⁴

Jar. Sherds of jars, probably made in the Mycenaean IIA phase, are decorated with a variety of patterns (FIG. 4, nos. 1, 9, 10, 13), a common one being that of the ogival canopy (F. pattern 13: 2).

4. *Naxos*. Several sherds unearthed by Welter and Kondoleon at Palati-Grotta belong to the period.

Cup. A few sherds of a large teacup type decorated with stipple pattern belong to the Mycenaean II phase.

Jar. To the Mycenaean I-IIA phase should be assigned the fragments of a jar with double-axe pattern in olive-black paint; close parallels come from Mycenae.⁵ A sherd from a Palace Style jar is decorated with a palm design.

Jug. Sherds from ewers are decorated with pendant pattern (F. pattern 64: 9), or argonaut designs.

5. *Melos*. The sherds mentioned here are representative of a large body of material.

Cup. Many fragments belong to the 'Vaphio' type of various sizes, most of them decorated with a connected spiral design.⁶ Sherds from teacups are patterned with the same design, or with double-axes; for one of these there is a particularly close parallel from Eleusis.⁷ Two more unusual designs consist of a connected hatched-loop pattern (cf. F. pattern 63: 2), and a floral pattern of the Mycenaean I phase which has additions in white.⁸

Kylix. Several unpublished sherds are decorated with a wavy border from the rim; occasionally there is a thin wavy line in the handle zone.⁹ Others have spiral patterns, and there are several of the so-called 'Ephyrean' type, decorated with rosettes or lilies.¹⁰

One-handed jar. One complete example is decorated with a connected hatched-loop design such as occurs on many examples of the same type from the chamber-tombs of Prosymna.¹¹

¹ BCH lxxi-lxxii. 459, fig. 35.

² Cf. *Chamber Tombs at Mycenae* pl. xli. 35.

³ e.g. *Korakou* fig. 51, 1.

⁴ *AVAA* i, pl. ii. 54.

⁵ Cf. *PM* iv. i, fig. 227.

⁶ e.g. *BSA* xvii, pl. xiv. 20.

⁷ Cf. *AJA* xxxvii. 276, fig. 5.

⁸ Both in AMO.

⁹ e.g. MCAC, PP. 245, 246, 248, 280.

¹⁰ e.g. MCAC, PP. 270, 279, 297.

¹¹ *BSA* xvii, fig. 2, 82; cf. *Prosymna* ii, figs. 140:137; 281:611.

Askos. Two almost complete specimens are decorated with a connected spiral pattern (F. pattern 46:29) and lilies.¹

Alabastron. Most of the alabastra fragments belong to the Mycenaean IIA phase. Those decorated with ogival canopy pattern show little variation from one another.² A more unusual pattern is that of connected ivy.³ A practically complete example decorated with argonauts and rock-work has a design of wavy lines on the base such as is found on an alabastron from Messenia; the only comparable alabastron as regards design comes from Egypt.⁴

E. MYCENAEAN IIIA-B WARE

Mycenaean IIIA and B have been grouped together here, as much of the material is fragmentary, so that it is sometimes impossible to decide to which class a sherd belongs. While most of the pottery appears to have been imported, some fragments painted in the later style are shown by their fabric and paint to have been locally made. These are mentioned together with the imported examples. The amount of the material is greater than for the preceding period and has been furnished by sites in twelve islands, namely Amorgos, Andros, Delos, Keos, Kimolos, Kythnos, Melos, Naxos, Paros, Seriphos, Siphnos, and Tenos.

1. *Amorgos.* Complete examples come from tombs, their exact provenance unknown.

Kylix. An example of the IIIA type (F. type 266) has a shallow bowl set unevenly on a tall stem.⁹

Three-handled jar. Of three vases of the IIIA type, the first, of good piriform shape, is decorated with bands and chevrons; the second has a wavy line in the handle zone; the third, more conical in form, has decoration similar to that of a jar from Kourion in Cyprus.¹⁰

Stirrup-jar. One example of a small globular type has a variant of the Mycenaean III flower; another from Xilokeratidi, of depressed globular type, is decorated with chevrons and has a running-dog frieze which occurs on a stirrup-jar from Seriphos.¹¹ Both are to be attributed to the IIIB phase.

Alabastron. An example of the angular type (F. type 84) is decorated in the handle zone with vertical lines.¹² A fragment of a IIIA convex type has a wavy border for design.¹³

Spouted jar. An example with a coat of red paint (F. type 156) probably dates to the IIIB phase.¹⁴

Teacup. Part of a teacup with red stipple pattern belongs to the beginning of the IIIA phase; other fragments are similar.¹⁵

Amphora. Several sherds of a thick fabric decorated with octopus and other marine motifs belong to large jars such as that from Prosymna.⁵ Others have mock stone patterns like jars from Kakovatos, ripple designs, and connected ivy patterns.⁶

Bridge-spouted jar. A sherd of this type of jar has a vertical hatched-loop pattern similar to one on a jar from Kakovatos; others have ogival canopy or double-axe patterns.⁷

Jug. One almost complete example of the bridge-spouted type has an ogival canopy pattern; a sherd with foliate pattern probably comes from a ewer.⁸

2. *Andros.* In the museum of Andros town are three small pots, probably recovered from the same tomb. Their provenance is given as Palaïoupolis.

Tankard. This example of a common IIIA and B type (F. type 226) retains traces of reddish-black lustrous paint round the rim and body.

Alabastron. This is a small specimen of the angular type with traces of painted bands. An unusual feature is two handles instead of three.

Stirrup-jar. An almost complete specimen is of the squat biconical type of the IIIB phase. All the paint has gone.

3. *Delos.* Most of the material comes from the area of the Temenos.

Kylix. One complete example of the IIIA undecorated type was found (F. type 267).¹⁶ In the museum are two sherds of banded kylix stems; published is a fragment from another decorated kylix showing a voluted Mycenaean III flower pattern (F. pattern 18, A) such as commonly occurs on the pottery of the Argolid and Rhodes.¹⁷

Alabastron. From the Purification Trench on Rheneia comes an example of the angular type of the IIIB phase.¹⁸

Stirrup-jar. Representing the IIIA period, a tall, piriform jar (F. type 166) is decorated in the handle zone with a

¹ BSA xvii, fig. 2, 96; *Phyl* fig. 109.

² e.g. MCAC, PP. 251, 281, 289, 299.

³ MCAC, PP. 269.

⁴ BSA xvii, pl. xi. 137; cf. M. N. Valmin, *Swedish Messenia Exped.* pl. xix. 28.

⁵ e.g. BSA xvii, pl. xiv. 14, 15; cf. *Prosymna* i, pl. vii.

⁶ e.g. MCAC, PP. 280, 290, 298.

⁷ MCAC, PP. 263, 268, 277; BSA xvii, pl. xiv. 9.

⁸ BSA xvii, pl. xi. 163; MCAC, PP. 283.

⁹ CVA Belgium, pl. 5, 1.

¹⁰ Op. cit. pl. 4, 17, 20; *Cat. Mus. Fine Arts, Boston* pl. v.

¹¹ cf. *MPL* pl. viii. 10.

¹² CVA Gt. Britain, pl. 484, 7, 11.

¹³ CVA Belgium, pl. 4, 10.

¹⁴ MCAC, AM. 20.

¹⁵ BMC i, A 1027.

¹⁶ MCAC, AM. 21, 23, 24.

¹⁷ *EADélos* xv, pl. i. 3.

¹⁸ Op. cit. pl. liii. 17.

¹⁹ Op. cit. pl. ii. 19.

U-pattern.¹ A fragmentary specimen of a perked-up IIIB type (F. type 180) is decorated only with bands and lines in very good brown paint.² Other fragments are in the Delos museum. Two fragments of coarse types were found on the site.³

Three-handled jar. In the Delos museum are several sherds from IIIA and B jars; all have banded decoration in the lower zones. A more complete vase is decorated in the handle zone with scale pattern in the early IIIA manner.⁴

Rhyton. The octopus decoration of a rhyton sherd is very like that of a IIIA rhyton from Ras Shamra.⁵

Jug. The body of a small vessel of fine piriform shape may have belonged to a jug like that of IIIA type found in Palestine.⁶

Pilgrim flask. A large fragment (F. type 189?) probably belongs to the later phase.⁷

Bowl. An undecorated specimen in the Delos museum is of the common Mainland type with handles set horizontally on the rim.⁸

4. *Keos.* The material from the site of Ayia Irini consists wholly of sherds picked up on the site.

Kylix. One fragment belongs to an undecorated type (F. type 267) probably of IIIA date. Another of the same type has very clumsy handles and the fabric shows it to have been locally made. Another kylix of local manufacture is represented by a sherd of the bowl decorated with an octopus tentacle (cf. F. pattern 21:21) on which the painter has left reserved areas in the colour of the clay instead of using the more usual white paint.⁹ The monochrome type with lustrous red wash is also represented by sherds.

Three-handled jar. This type was represented by many sherds with banded and spiral decorations (e.g. FIG. 4, no. 8).

5. *Kimolos.* One sherd was picked up on the site of Ellinika.¹⁰ Possibly it comes from a stirrup-jar of IIIB depressed type; the decoration consists of bands and a zone of semicircles in brilliant red paint.

6. *Kythnos.* A stirrup-jar was seen by Furtwängler in a dealer's shop with its provenance given as Kythnos.¹¹ It is described as being 'of the usual type, with semi-circles on the shoulder'. Such a description might apply to a IIIB jar.

7. *Paros.* Very little Mycenaean pottery appears to have been found on the site of Paroikia.

Kylix. An undecorated type, possibly of the IIIA kind found in Delos, Keos, and Melos (F. type 267), is described in the report. A published fragment may belong to a kylix decorated with scale pattern of IIIA type.¹²

8. *Seriphos.* One large globular specimen (F. type 170) is very well preserved, and shows banded and Mycenaean III floral ornament. Furumark assigns it to the later phase of the IIIA period.¹³

9. *Siphnos.* In a trial trench not far from the Kastro was found a single sherd belonging to a kylix with spiral decoration.¹⁴

On the rocky slope of To Froudhi tou Kalamitsiou was a kylix base and stem with a rough wash of red paint. Probably this is a local piece imitating Mycenaean monochrome ware.

10. *Tenos.* From the site of Akroterion Ourion come several sherds with a decoration of bands and spirals which may belong to jars.

11. *Naxos.* The following material comes from Palati-Grotta. Most of the pottery seems to me to be of the imported kind, but some fragments come from locally made vases.

Kylix. To the IIIA phase may be assigned many sherds of kylikes with varied decoration. One has a triple-stemmed ivy pattern as on a kylix from Milia (Cyprus) and two others have a linked spiral pattern similar to that on an Enkomi kylix.¹⁵ Of perhaps IIIB date are two sherds with a zone of interlocking ivy leaves, a pattern which appears on a bowl from Athens.¹⁶ Another has a voluted version of the Mycenaean III flower (F. pattern 18, A) which is paralleled on kylikes from Mycenae.¹⁷ On many sherds appear various combinations of the common murex motif, and at least two are decorated with versions of the octopus motif with details added in white. Another fragment, with a diagonal form of decoration such as decorates a kylix from Ialysos in Rhodes, may have been manufactured locally, for the clay is coarse and pink in tone and the paint only slightly lustrous.¹⁸ In addition there are many fragments of undecorated types, and banded stems such as belong to kylikes of both IIIA and B periods.

Bowl. There are several almost complete examples of the shallow type of bowl with horizontal handles on the rim, some decorated with bands, others plain. Fragments of other bowls have murex designs or a more geometrical central panel.

Tankard. Two practically complete specimens, 14 and 15 cm. high, should be assigned to the IIIB phase. The first has a hooked spiral design (F. pattern 49), the other a triangular design (F. pattern 61:13); other sherds show similar designs.¹⁹

Three-handled jar. A fragment with a stylized ivy-leaf design belongs to a large jar with three vertical handles; this is very similar to a jar from Ialysos of the early IIIA

¹ *EADelos* xv, pl. i. 14.

² *Op. cit.* pl. i. 10.

³ *Op. cit.* pl. i. 9; *BCH* lxxi-lxxii, pl. xli b.

⁴ *EADelos* xv, pl. ii. 21.

⁵ *Op. cit.* pl. i. 13.

⁶ *Op. cit.* pl. i. 11; cf. *MPL* pl. xv. 8.

⁷ *EADelos* xv, pl. lii. 15.

⁸ Cf. *Korakou* figs. 87, 88.

⁹ Cf. for an example of its model, *Phyl* pl. xxxii. 1.

¹⁰ In the BSA museum, Athens.

¹¹ *FLMV* 32.

¹² *AM* xlii. 70 and fig. 79.

¹³ *CVA* Denmark, pl. 65, 6.

¹⁴ *BSA* xlii. 33, no. 28.

¹⁵ *PAE* 1950, 278, figs. 10, 11; cf. *MPL* figs. 2, 3.

¹⁶ Cf. *Hesperia* ii. 367, fig. 39a.

¹⁷ Cf. Nauplion museum nos. 537, 2617.

¹⁸ Cf. *MPL* pl. iii. 4.

¹⁹ e.g. *PAE* 1950, 278, fig. 10.

phase.¹ Belonging to other smaller jars are many fragments with scale patterns.

Stirrup-jar. There are numerous examples of rather small types with versions of the Mycenaean III flower in the handle zone.

Krater. Several fragments come from the neckless type (F. type 8), and these belong to the latter part of the IIIA phase or to IIIB. A large fragment has a tri-curved arch pattern which appears on a krater from Ialysos.² Two are decorated with a broad linked spiral design like a krater from the Menelaion near Sparta.³ A more unusual piece is decorated with panels of roundel pattern (F. pattern 65) and dates to the IIIB period.

12. Melos. The Third City of Phylakopi has produced the largest amount of IIIA and B pottery from the islands, and the bulk of it is unpublished. Much of it came from the well in the courtyard of the Megaron, but many sherds were also found over the rest of the excavated portions of the site.⁴

Kylix. A very large number of fragmentary kylikes was found. To the later IIIA phase may be assigned sherds with octopus patterns similar to those on kylikes from Rhodes.⁵ One with a tri-curved arch pattern is again paralleled from Rhodes.⁶ Other designs are the multiple-stem ivy pattern and variants of the voluted Mycenaean III flower.⁷ A published fragment probably from a kylix is decorated with a hybrid Mycenaean III flower (F. pattern 18, 89); this is a distinctive pattern and may have been produced in the same potter's shop as the other examples of it which come from Mycenae and Prosymna.⁸ Belonging to the IIIB period are sherds decorated with interlocking ivy leaves and a variety of murex patterns.⁹ One of the finest decorated kylikes is represented by a published sherd which shows a horizontal octopus tentacle along the bowl, with additions in white paint; the closest parallel seems to come from Vari in Attica.¹⁰ Plain kylikes and monochrome types were also common.¹¹

Bowl. Phylakopi provides us with similar bowls to those which came from Naxos. A variety of fragments belong also to two-handled bowls, most of them decorated with the antithetic spiral pattern (F. pattern 50). The design is one which lends itself easily to modification, as is seen on these sherds, the fabric of which is good.¹² Some of poorer fabric, thickly slipped to cover the impurities in the clay, are clearly locally made.¹³

Teacup. A fragment of a very fine teacup painted with a connected spiral pattern belongs to the early IIIA period.¹⁴

Tankard. One fragment is decorated in the lower zone with vertical murices.¹⁵

Spouted bowl. A fragmentary example of this Rhodian rather than Mainland type is decorated with bands of paint.¹⁶

Rhyton. A large fragment of one has been published; the decoration consists of an oddly assorted collection of motifs and in this respect it is similar to a IIIB rhyton from Ras Shamra.¹⁷ Another, probably of the same period, is decorated with semicircles and bands.¹⁸

Three-handled jar. A large fragment of a pithoid jar with scale pattern is very like one from Ialysos of early IIIA date.¹⁹ Probably belonging to a larger jar is a fragment with a conventionalized ivy motif in the handle zone. Apart from a similar example from Naxos, the other comparable examples come from Thebes, Mycenae, Troy, and Ialysos.²⁰ From smaller jars come sherds with spiral and scale patterns.²¹

Stirrup-jar. Many sherds come from this type, but owing to their small size it has often been impossible to make out their exact shape. Apart from the usual Mycenaean III flower which decorates the shoulder of most of these, there are a few unusual fragments which deserve mention. One small jar is decorated with a hatched-loop pattern elsewhere unknown on this type.²² Other fragments have groups of arcs on the shoulder; in some, the monotony of the lower striped zone is relieved by a narrow frieze of, for instance, running-dog ornament.²³ One fragment which seems to me to be local has a flower on one side of the shoulder and a lozenge on the other.²⁴ One almost complete jar is decorated on the shoulder with a connected spiral design in poor orange-red paint; such a decoration is well outside the IIIB *koine* style.²⁵ Another has a degenerate IIIB pattern of vertical wavy lines such as is seen on a jar from Ras Shamra.²⁶

Krater. A small krater with horizontal side-handles is, to judge from the fabric, an imported piece, but a sherd with a similar pattern of semicircles was manufactured locally.²⁷ Other fragments from kraters have scale patterns or connected and hooked spirals.²⁸ A more unusual piece combines vertical murices with a voluted Mycenaean III flower.²⁹

¹ Cf. *MPL* pl. i. 11.

² Cf. op. cit. pl. ii. 3.

³ e.g. *PAE* 1949, 121, fig. 14; cf. *BSA* xvi, pl. i. 1.

⁴ *Phyl* 270.

⁵ *MCAC*, PP. 348, 361; cf. *CVA* Denmark, pl. 51, 6, 1, 2.

⁶ *MCAC*, PP. 337; cf. *FLMV* pl. xi. 70.

⁷ *MCAC*, PP. 315, 342.

⁸ *Phyl* pl. xxxii. 9; cf. *Chamber Tombs at Mycenae* pl. xvi b, *Prosymna* ii, fig. 290:702.

⁹ e.g. *CVA* Gt. Britain, pl. 481, 51; *MCAC*, PP. 324.

¹⁰ *Phyl* pl. xxxii. 1; cf. *BMC* i. A 1086.

¹¹ *BSA* xvii, pl. xii. 43, 68.

¹² e.g. op. cit. pl. xiv. 43.

¹³ e.g. *MCAC*, PP. 350.

¹⁴ In *AMO*.

¹⁵ In *AMO*.

¹⁶ In the Plaka museum, Melos; cf. *MPL* pl. v. 1, 2.

¹⁷ *Phyl* pl. xxxii. 3; cf. *MPL* pl. xvi. 14.

¹⁸ *MCAC*, PP. 355.

¹⁹ In Melos; cf. *MPL* pl. i. 6.

²⁰ *MCAC*, PP. 311; cf. *Troy* iii. ii, fig. 409, no. 37, 954, &c.

²¹ *MCAC*, PP. 335, 353, 349, 364.

²² *MCAC*, PP. 365.

²³ In *AMO*.

²⁴ *MCAC*, PP. 408.

²⁵ In *AMO*.

²⁶ In *AMO*. Cf. *MPL* pl. xvi. 17.

²⁷ In Melos. Cf. the local sherd, *MCAC*, PP. 370.

²⁸ *MCAC*, PP. 320, 345, 390.

²⁹ PP. 352.

13. Unknown provenance. In the Museum of Classical Archaeology at Cambridge are a certain number of sherds from unspecified Cycladic sites. The material is as follows.

Stirrup-jar. Fragments of two small specimens (CC. 23, 25) are decorated with flowers in the shoulder zone.

Bowl. A sherd from a bowl or kylix (CC. 30) has a tri-curved arch pattern (F. pattern 62:15) of IIIB style. Another (CC. 35) with a triglyph pattern (F. pattern 75:4) forms part of a two-handled bowl of IIIB type.

F. MYCENAEAN IIIC WARE

The only islands which have produced this ware are Amorgos, Delos, Paros, Naxos, and Melos. There is considerable evidence of local manufacture, although some of the pottery seems still to have been imported.

1. Amorgos. A complete example of a late IIIC jug (F. type 137) has a trefoil lip and coarse pendant decoration on the shoulder; unfortunately a parallel jug is of unknown provenance.² There are also sherds from bowls or kraters, one of them painted in 'Close Style'.³

2. Delos. Fragments from two-handled bowls are reported to have been found.⁴

3. Paros. A fragment of a two-handled bowl with sketchy antithetic spiral decoration is published from the site of Paroikia.⁵

4. Naxos. Larger amounts of IIIC pottery come from Palati-Grotta. Much of it was locally made.

Kylix. The greater part of a kylix of buff clay containing much mica is a local product. The interior is covered with poor orange paint, which is also applied to the rim and handles; the handle zone is decorated merely with a narrow wavy line.

Two-handled bowl. One large fragment is painted in 'Granary Style' with a thin antithetic spiral pattern.⁶ There are many other similar sherds. One almost complete bowl is coated completely with thin reddish paint except for a narrow zone on the exterior which has a thin wavy line in the same paint. A very similar bowl has no decoration on the reserved band.

Stirrup-jar. A fragment decorated with bands and lines on the lower part of the body has a shoulder pattern (F. pattern 63:35) of the early IIIC phase.⁷ Another has lozenges or triangles with dotted borders.⁸

Krater. To a deep krater with horizontal side-handles and rolled rim belongs a large fragment decorated with wing-like motifs; there is a somewhat similar example from Asine.⁹ Another fragment of the same type of krater is decorated with birds on either side of a geometrical panel;

Jug. Part of jug with a cut-away neck (CC. 21) approximating to F. type 144 is probably of IIIB date. There is a slight collar and a string-hole through the top of the handle.

Alabastron. Part of an angular alabastron is decorated with brown paint with horizontal lines near the base. Above these is a hooked form of decoration paralleled on a IIIA alabastron from Ialysos.¹

Krater. Probably belonging to small kraters are two sherds, one with a carelessly drawn scale pattern (CC. 31) and the other with bands and spirals on the exterior (CC. 28).

the paint is a good red and probably this piece should be assigned to the earlier part of the period.¹⁰

Jar. A jar with two side-handles belongs to the 'Granary Class' and is paralleled by a jar from Mycenae.¹¹ Another, 18 cm. high, is decorated with a spiral pattern filled by lozenges and loops, after the manner of 'Close Style' painting. There are two side-handles and one from the shoulder to the rim; the paint which emphasizes the side-handles is carried through the horizontal bands below them in Proto-geometric style. Several other fragments of the same type of jar are decorated with dullish black paint with wavy lines down the vertical handle, and have spiral patterns on the shoulder. These are almost sub-Mycenaean in style and should undoubtedly be attributed to the last phase of the IIIC period.

5. Melos. Only a small amount of the pottery of this period from Phylakopi has been published.

Kylix. A kylix about 18 cm. high has a conical bowl and two side-handles. Poor, reddish-brown paint coats it in a streaky manner.¹² A fragment of a local kylix has vertical and horizontal bands of orange-brown paint; the formation of the handle is very clumsy.¹³

Two-handled bowl. Many fragments are decorated in the 'Granary Style' with spiral or geometrical panel designs.¹⁴ Some of them are manifestly local products; their pock-marked surface is due to the burning out of impurities during firing. Apart from these decorated specimens, there is one completely coated with streaky paint like the kylix above.¹⁵

Alabastron. One almost complete specimen (F. type 98) belonging to the early part of the period has been published.¹⁶

Suspension pot. In this unique example the suspension lugs are a reminiscence of much earlier ware of the Middle

¹ MPL pl. i. 2.

² CVA Belgium, pl. 4, 9; cf. BMC i, A 1121.

³ BMC i, A 1028, 1-5; A 1029.

⁴ EADelos xv, pl. xi. 41; FLMV 32.

⁵ AM xlii, fig. 80.

⁶ PAE 1950, 278, fig. 11.

⁷ Loc. cit.

⁸ In the BSA museum, Athens.

⁹ Asine fig. 207, 6.

¹⁰ PAE 1950, loc. cit.

¹¹ Chamber Tombs at Mycenae pl. xii. 5.

¹² In Melos.

¹³ MCAC, PP. 392.

¹⁴ e.g. Phyl fig. 124.

¹⁵ BSA xvii, pl. xii. 132.

¹⁶ Op. cit. pl. xii. 73.

Cycladic period.¹ Its general date is fixed by the decoration which combines IIIB and C motifs. It is undoubtedly a local product.

Stirrup-jar. Several fragments are preserved, but no whole jar. The fabric is generally poor and the black paint lacking in lustre. Typical sherds show that the former even striping of the body has given place to a more uneven application of bands, which are often interspaced by plain zones. Sometimes the latter are broken by groups of vertical lines, or bordered by small semicircles; in one specimen the shoulder is decorated with a geometrical panel.²

Jar. One whole specimen similar to some from Naxos is decorated on the shoulder by a repeating pattern of spirals and panels; on the body is a bird.³

Krater. There are many fragments from kraters, but no whole example. One large fragment belonging to the earlier phase has two vertical side-handles and is decorated with

geometrical panels.⁴ More unusual sherds have broader geometrical panels and semicircles in profusion. The clay of many of these, although well fired and hard, contains many impurities and some, therefore, may have been locally made. A certain class of sherd, decorated with figure-scenes for which there is no exact parallel from any other Mycenaean site, probably come from bowls or kraters. In these we see a revival of older figured styles which delighted in the portrayal, albeit sometimes crude, of men and animals.⁵ The contemporary figured kraters from the Mainland and elsewhere may have been instrumental in promoting this kind of painting, but the Cycladic examples are quite distinctive. Many of them seem to picture violent scenes of action, which provide an interesting commentary on the times.

6. Unknown provenance. Several fragments of bowls of kraters, probably belonging to the beginning of the period, are decorated with spiral patterns in lustreless brown or black paint.⁶

G. CHRONOLOGY

Unfortunately we have but few stratigraphical details with regard to the local fabrics of the Late Cycladic I and II periods from Thera and Phylakopi. As regards Thera, it seems likely that the settlements were submerged by volcanic eruption soon after the end of the Late Cycladic I phase, for no L.M. IB or II pottery has been found, although L.M. IA ware was imported. The latest vase from the island is a jug which is decorated in the L.M. IA manner while incorporating an ivy pattern which occurs on a Mycenaean IIA goblet from Lachish.⁷ It is probably unlikely that there was any further settlement in the Bronze Age, although doubtful 'Mycenaean' sherds were reported from Mesavouno.⁸

Some of the local fabrics of Phylakopi which copy L.M. I and II models were found in the very latest deposits of the Second City, which indicates that the end of that City did not come before the L.M. I period was well under way.⁹ In the earlier excavation report it is clear that at the beginning of the Third City the bulk of the pottery is local Melian, but in the later stages it is almost completely displaced by imported wares. In the first half-metre of a trial trench, for example, out of a total of about 3,500 fragments, 2,000 were 'imported Mycenaean' (i.e. Minoan and Mycenaean), 1,300 were of coarse local ware, and 200 or so belonged to local decorated pottery.¹⁰ During the Late Cycladic I and II periods the amounts of Minoan and Mycenaean seem to have been about equal, but in the succeeding period the Mycenaean almost completely ousted the Minoan. It is probable that the megaron was built at the close of the IIIB period, for in the courtyard (and particularly in the well) were found many fragments of IIIA and B kylikes.¹¹

From the IIIA period onwards at Phylakopi and at other sites where the evidence is less complete, the bulk of the decorated pottery was of the imported kind, showing affinities with Mainland and Rhodian pottery. In the IIIB period, however, some pots seem to have been manufactured locally, and at the end of that period a local figured style, without any exact parallels elsewhere, sprang up at Phylakopi. As evidence for habitation at the very end of the Late Bronze Age, there are pots in almost sub-Mycenaean style from Amorgos, Melos, and Naxos.

¹ *Phyl* fig. 125. ² MCAC, PP. 371, 379, 382, 399.

³ *Würzburg Catalogue* pl. ii, no. 42.

⁴ MCAC, PP. 378, 394, 403.

⁵ *Phyl* pl. xxxii. 11-17.

⁶ MCAC, CC. 26, 27, 29, 36.

⁷ See above, p. 26.

⁸ *Thera* iii. 237, n. 9.

⁹ e.g. L.C. I pedestal vases; see above, p. 25.

¹⁰ *Phyl* 162.

¹¹ *Op. cit.* 160.

CONCLUSIONS

A. THE INTRODUCTION OF THE MIDDLE BRONZE AGE

'By the end of the early Aegean period, Greece at last possessed a somewhat homogeneous civilization; but the Middle Aegean civilization starts with the disintegration of what limited unity had been created.'¹ The break-up of the Early Helladic culture is so well known that it need only be mentioned here. As to the effect on the Cyclades, one cannot agree with Frankfort's further remarks.² Evidence has been given to show that at least fourteen settlements of varying size and importance flourished during various stages of the Middle Cycladic period, though not all seem to have been based on Early Cycladic sites.

Matt-painted ware painted in the Rectilinear Style which developed in the late Early Cycladic period occurred throughout the islands with the exception of Thera. Grey Minyan, on the other hand, has a similar distribution with the exception of Amorgos and Thera. While the island Minyan bears resemblances to that of the Mainland, one need not necessarily conclude that it was introduced *first* from that quarter. The evidence of the Early Bronze Age period shows that there was particularly close contact between the Cyclades and north-western Anatolia, and if, as seems likely, Minyan ware was introduced to the west from that area, its most obvious route would lie through the islands.³ Whether the introduction of this ware was accompanied by destruction as on Mainland sites it is impossible to say, for the site of Phylakopi alone offers evidence which is at all complete; this site, moreover, with its ties with Crete, cannot be regarded as typical of the rest. The continuity of the pottery between the First and Second Cities there suggests that the destruction of the First was not due to aggression but possibly to some natural cause such as earthquake. But the occurrence of Minyan pottery in the early Second City deposits and the sporadic appearance of megaron-type dwellings indicates the infiltration of northern cultural elements.⁴ A thin stratum of burnt matter which occurs throughout the site of Ayia Irini in Keos possibly represents temporary destruction at this period, and the building of the fortification walls in both Tenos (Akroterion Ourion) and Phylakopi suggests that the times were unstable.⁵

When conditions had become more settled it is likely that there was close contact between the Mainland and the islands; which would account for the importation of Minyan ware into the islands from that quarter. We showed reason to believe also that much of the matt-painted ware of the Mainland was dependent on Cycladic types.⁶ Other evidence of contact between the two areas is given by a series of pottery-marks which occur on ware from Phylakopi, Paros, Aegina, Korakou, Asine, and Lerna.⁷ Generally speaking, the signs are commonest on coarse ware, but they also occur on painted and Grey Minyan and red burnished fabrics.⁸ Lerna has produced numerous signs, fourteen of which are paralleled from Phylakopi, but most of them seem to come from later Middle Helladic contexts.⁹ At Phylakopi, however, the signs occur earliest at the very beginning of, or even a little time before, the introduction of the Middle Cycladic period proper. It seems likely, therefore, that the usage of the signs originated in the Cycladic area and spread thence to the Mainland as trade and intercourse increased.

¹ Frankfort, *Studies* ii. 136.

² Loc. cit. See above, p. 9.

³ Which would account for there being no Minyan in the extreme south-east of the Cyclades.

⁴ For a megaron of the Second City, *Phyl* fig. 26.

⁵ Cf. R. W. Hutchinson, *Town-planning Review* xxiii. 268.

⁶ See above, p. 23.

⁷ I am grateful to Mr. Caskey of the American School of Classical Studies for giving me information on the Lerna material.

⁸ Unpublished examples from the site of Kolonna in Aegina are in the Aegina museum.

⁹ *Hesperia* xxiv. i. 34.

B. MIDDLE CYCLADIC II: THE RISE OF PHYLAKOPI

The succeeding period, the pottery of which has been termed above 'Middle Cycladic II', should not merely be regarded as a stylistic one, although the Second City of Phylakopi yielded no floor-level which could be considered as distinctly belonging to a period intermediate between the earlier and later stages of the City.¹ The new style of pottery painted with Curvilinear designs, which derives many decorative elements from M.M. II pottery, appears when the Rectilinear ware is showing signs of break-up; without this style the M.C. III painted wares which chronologically succeed it could not have been created.

The Curvilinear Style is not the only new feature at this time. Several new vase-types, the origin of which is Anatolian, make their first appearance. Two of these are the jug with plastic 'breasts', which has no parallel in Crete, though it was copied on the Mainland from Cycladic models; and the spouted jar, a common type in Cretan ceramics from the Early Minoan period onwards, having been adopted from the east. The third type is the bowl with one loop-handle, which occurs on several Cycladic sites, but not at all in Crete or on the Mainland. Some of these Anatolian influences had spent themselves by the beginning of the Middle Cycladic III period, and we are justified therefore in distinguishing an intermediate phase between that and the first Middle Cycladic period. It is a time when Cretan influence becomes more prominent in Melos, and Anatolian influence on the whole Cycladic group. Possibly there was a slight influx of Anatolian peoples into the Cyclades at this period; this could provide a clue to the mysterious 'Carian' element to which several ancient authorities referred.²

Phylakopi seems to have had a monopoly of Cycladic trade, exporting not only obsidian but also pottery, which has been found in Naxos (Rizokastelia), Siphnos, Aegina, and Athens. It should also be noted that the earliest M.C. pottery from Thera is that which shows a slavish copying of the Melian Curvilinear Style.

C. MIDDLE CYCLADIC III: THE THALASSOCRACY OF MINOS

For the final stage of the Middle Cycladic period, which culturally speaking passes without a break into Late Cycladic I, there is evidence of a more significant kind. Phylakopi still carries on a vigorous trade, as is shown by the distribution of her pottery, not only among the islands of Delos, Siphnos, Tenos, and Thera, but also on the Mainland at Asine, Athens, and Mycenae. In the earlier part of the period Mainland matt-painted ware still derives some inspiration from contemporary Cycladic pottery, borrowing, for example, the convention of the 'panelled' cup. Aegina too manufactured pottery with a distinct Cycladic flavour. Farther afield, Cycladic sherds of a late transitional type were found at Hala Sultan Tekké in Cyprus; fragments too of Cypriot pottery in Melos and Thera indicate the line of the sailing-route from the Levant.

Of greater interest is the evidence of Cretan connexions at this period. Minoan ware was imported and the local styles of pottery influenced particularly by designs on contemporary frescoes, although it must be emphasized that as yet there was no slavish copying of Minoan ware. One quarter of Phylakopi at least seems to have been thoroughly Minoanized, possessing pillar-rooms and frescoed walls.³ Rhyta in the form of cows' and bulls' heads found at various points of the site suggest that there was some observance of Minoan ritual, and to judge from signs on pottery it seems likely that the Linear A script was in use.⁴

Nor did Phylakopi alone possess some degree of Minoan culture. Material from Keos includes copies of M.M. III pottery; similar material from Delos and Thera, where pillar-rooms and frescoes were also found, indicates how wide was the diffusion of Minoan culture.⁵

¹ But Mackenzie observes the three stylistic phases, *BSA* iv. 28.

⁴ *Op. cit.* figs. 176, 178; pl. xl. 31.

² e.g. Herod. i. 171.

⁵ *Op. cit.* fig. 27, 70-79.

³ *Phyl* fig. 27, 70-79.

Cretan blossom-bowls belonging to the end of the present period were found in Delos, Naxos, and Melos; loom-weights with one or two perforations found in Keos, Melos, and Thera are of the same size as examples from Gournia.¹

Concerning the find of 'Black and Red' bird vases in the Temple Repositories of Knossos (fragments of which have also been found in Thera and at Mycenae), Evans goes so far as to postulate that these, probably containing Melian wine, represent a form of tribute to the ruler of Knossos. 'The volcanic soil of the island' (he goes on to say) 'is in fact specially favourable to the cultivation of the vine, which may have begun here relatively early.'² The same could be said with regard to Thera, in which colonies could have been planted by the inhabitants of Phylakopi for the purpose of such cultivation.³ In support of this hypothesis it should be remembered that although the pottery from the island mirrors Minoan styles, it is all dependent on contemporary Melian ware; much of the material, too, consists of large amphorae and pithoi such as would be used for the storage and transportation of wine.

Combining the Cycladic evidence with that from other areas one must conclude that it was at this period that the expansion of Crete was at its height; Minoan pottery from Aegina and Kythera, the influx of Minoan culture and adoption of ceramic styles at Mycenae and elsewhere on the Mainland, the colony planted by Cretans at Trianda in Rhodes, all testify to the power exerted by Crete. It is undoubtedly to this period that the words of Thucydides must refer: Μίνως γὰρ παλαιάτατος ὢν ἀκοῇ ἴσμεν ναυτικὸν ἐκτίσαστο καὶ τῆς νῦν Ἑλληνικῆς θαλάσσης ἐπὶ πλεῖστον ἐκράτησε καὶ τῶν Κυκλάδων νήσων ἤρξε . . .⁴ What the status of Phylakopi was it is impossible to say; but the pillar-room complex may well have housed the representative of the ruler of Knossos.⁵ The tradition, moreover, that Minos came to Keos, married a local maiden Dexithea, and left his son Euxantios there as ruler, although it is not to be taken literally, has at least its foundations based upon fact.⁶

What then was the effect of this state of affairs upon the Mainland? The hypothesis of a Cretan conquest has now been abandoned generally, and indeed the evidence from Mycenae, for example, does not show that Minoan customs had been adopted wholesale. But the theory that trade accounted for the Minoanization which took place during this period does not seem to be wholly satisfactory. It has been argued that behind Mycenae there lies a rich deposit of copper ore which might have been traded in exchange for Minoan goods; if this is so, why do Schliemann's graves contain such a large number of arrow-heads made of stone and obsidian? On the other hand there may have been some kind of political alliance between the powers of Crete and the Mainland; but this is rather a question which could only be fully answered by contemporary records which are lacking at the moment.

Whatever the relationship, it has been made clear from certain discoveries in the Second Circle at Mycenae that the Minoan goods and pottery were preceded in some degree by pottery from the Cyclades. Not only were fragments of Cycladic vases (i.e. of Melian 'Black and Red' bird vases, such as were found in the Temple Repositories at Knossos) found, but also some pottery of Mainland fabric which is clearly modelled on M.C. III and early Late Cycladic I ware. For example, in Grave Alpha was a small jug of Yellow Minyan fabric, beak-spouted and with the typical bulging throat of M.C. III jugs. A straight-necked jug from the same grave has a naturalistic spiral ornament remarkably similar to one on a sherd from Phylakopi.⁷ From Grave Beta comes a jar decorated with ivy tendrils and foliate bands applied in a similar

¹ e.g. in the Thera museum, Akr. P. 1; cf. *Gournia* pl. iii. 9, 10.

² *PM* i. 561.

³ The first contact seems to have been made in the M.C. II period.

⁴ i. 4.

⁵ Undoubtedly built during the M.C. III phase.

⁶ Bacchylides, *Ode* i; cf. Pindar, *Paean* iv. 35-53.

⁷ *ILN* 27 Sept. 1952, fig. 6; cf. *Phyl* pl. xvii. 33.

way as on a strainer from Thera.¹ In Grave Gamma, one of the richest of the group, were several large jugs with the bulging throat of the M.C. III type. One with polychrome decoration has a design of birds and reeds, a type of composition common in both Melos and Thera, another traces of vegetable ornament of some kind. A third vase, a hydria of Middle Helladic type, is decorated with large double circles on either side, accompanied by accessory ivy and palmette decoration, a form of decoration again paralleled on a series of spouted jars from Thera.² And in Grave Lambda was found a jug with connected disk decoration which seems to have been derived from Melian 'Black and Red' schemes of composition.³ Finally in Grave Nu were found two jugs of M.C. III type, one of them decorated with flying birds and ivy tendrils inspired by contemporary Melian ware.⁴ Cycladic-Mainland parallels, moreover, do not consist only of ceramic material. Noteworthy finds in Thera are part of a dagger blade inlaid with gold axes on a bronze ground, after the fashion of inlaid blades from Mycenae, Prosymna, and Vaphio; and marble and clay goblets of the type found in alabaster in the first Grave Circle at Mycenae.⁵ The construction of graves in the Second Circle there is paralleled by the construction of some of the Phylakopi shaft-graves which appear to have been in use in the M.C. II-III period, and their roofing is similar to that of the houses in Therasia, where beams and reeds were overlaid with clay.⁶

It is clear therefore from the accumulation of such evidence that the Cycladic population was actively concerned with the Cretans in intercourse with the Mainland. Nor need we look far to find a reason for the Cretan interest in Keos; the settlement of Ayia Irini commands the north-western stretch of the island (with its safe anchorage in the Bay of Ayios Nikolaos) which every ship bound for the Saronic Gulf from the Aegean must safely circumnavigate.

D. LATE CYCLADIC I-II

The ceramic evidence shows that at the beginning of this period contact was maintained between Crete and the islands of Delos, Keos, Melos, and Thera. At Phylakopi the local pottery loses its distinctive style to become wholly dependent on Minoan models; this is not to be thought of as a sudden Minoanization, as Furumark has said, but rather as the culmination of a process which had begun in the M.C. II period.⁷ Whether Phylakopi was so active and constant a participant in Aegean affairs is doubtful. The exportation of her pottery seems almost to have ceased.⁸ Obsidian too was declining in importance for the manufacture of tools and small weapons, although Cretan stone-workers could still find an artistic use for it.⁹

It is towards the end of this period that we observe the rise of the Mainland powers. By the end of the Late Cycladic I period the amounts of Mycenaean pottery imported into the Cyclades equal, and in such islands as, for example, Naxos outnumber, the amounts of Minoan. This ware so closely copies the stock Minoan types and decorative features that it must have been made by potters trained in the Cretan school. It is so fine a product that it found markets as far afield as Byblos and Lipari.¹⁰

E. LATE CYCLADIC IIIA-B

The tendencies seen to be developing during the previous period culminate now. To whatever causes the fall of Knossos was due, the event entailed the disappearance of most Minoan

¹ *ILN* op. cit. fig. 4.

² Op. cit. fig. 12.

⁷ *OpArch* vi. 199-201.

³ Cf. *Phyl* pl. xx. 5.

⁴ *Archaeology in Greece* 1952-3, 33, fig. 7.

⁵ O. Montelius, *La Grèce préclassique* i, pl. 9, 10; *Cat. Mus.*

d'Athènes no. 3964.

⁶ Cf. *Archaeology in Greece* 1952-3, 33; *Phyl* 237.

⁸ Several pots in Mycenae are of possible Melian manufacture.

⁹ A rhyton from Tyllissos, *PM* II. i. 56, no. 6.

¹⁰ For Lipari (*not* Minoan pottery) see *ILN* 2 Aug. 1952, fig. 1.

contacts with the islands. L.M. III ware has been found only in the islands of Kimolos, Melos, and Amorgos, and in very small amounts. Mycenaean ware, on the other hand, had an increased vogue, and has been found in Amorgos, Paros, Siphnos, Tenos, Kimolos, Kythnos, and Seriphos in addition to the islands where Mycenaean I-II pottery has been found. The large megara of Phylakopi and Grotta in Naxos, which are of Mainland type, together with numerous small finds such as sealstones, terracotta idols, bronze implements, and domestic pottery, fully attest Mycenaean settlement. Of unique interest is the deposit of ivories under the Artemision in Delos, of which several pieces, such as miniature columns, are paralleled by recent discoveries at Mycenae.¹ This deposit, associated with both pre- and post-Mycenaean objects, provides evidence for something more than mere habitation. Now that the Linear B tablets have disclosed that many of the gods of the Olympian pantheon were already being worshipped, it is not beyond the range of possibility that Delos was the seat of a cult, maybe that of Apollo, at this early period.²

The settlements scattered throughout the islands we may regard as convenient stopping-places for ships bound for the Levant. The partial local manufacture of pottery modelled on Mycenaean types may indicate that the importance of these settlements waned when the Rhodian and Cypriot colonies had taken firm root and were becoming somewhat independent of Mainland ties.

F. LATE CYCLADIC IIIC

In the final period a general decline of culture is observable, symptomatic of the general dissolution of Mycenaean civilization. Mycenaean IIIC pottery has been found only in Amorgos, Delos, Melos, Naxos, and Paros. Much of this appears to have been locally made, although it still shows affinity to Mainland types. It is quite clear, however, that the Mainland had lost direct control of the islands, and it is probably for this reason that there is no mention of them in the Homeric Catalogue. The renaissance of a local ceramic style in Melos, displaying scenes of warfare and violent action, is indicative of the events which were bringing the Mycenaean civilization to a dramatic close.

K. SCHOLES

¹ *BCH* lxxi-lxxii, 148-254; cf. *BSA* xlix, pl. 40c.

² In which case the ivory carving of an archer is signi-

ficant. On the question of a Delian cult cf. G. de Santerre, *RA* 1948, 389 ff.

DELPHINION IN CHIOS

(PLATES 3-4)

IN 412 B.C., when the Peloponnesian War had reached its most critical stage for Athens after her Sicilian losses, Chios and Erythrae revolted from the Athenian League and appealed to Sparta for armed assistance. This was sent, despite Athenian attempts at interception, and the revolt spread up and down the Asia Minor coast. The Athenians reacted quickly, sent ships to Samos, recaptured Lesbos, and opened operations against Chios by raiding the countryside

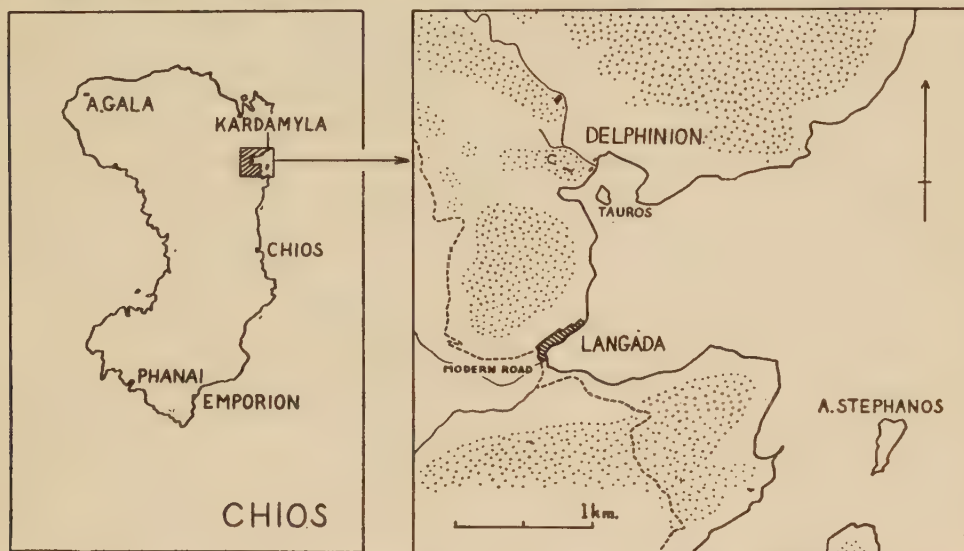


FIG. 1. THE ISLAND OF CHIOS, AND THE AREA OF DELPHINION AND LANGADA

near Chios town. A hostile Chios with her war fleet constituted the major threat to Athenian interests in the East, and stronger measures, which might also provide more permanent security, were needed. Thucydides tells (viii. 38, 2) how the Athenian ships 'crossed from Lesbos to Chios with armed force, and, in command of land and sea, fortified Delphinion, a place strong on the landward side, served by harbours, and not far distant from Chios town'. The same historian, with Xenophon and Diodorus Siculus, describes the fortunes of this Athenian venture.¹

This is the only account of Delphinion in Chios which is preserved from antiquity and, but for an isolated inscription recording the renting of property there, this must be the only memorable, and therefore remembered, episode in its history. Much later, in the Genoese and Turkish periods, the name survived as Porto Delphino, and to the present day, perhaps prompted a little by local scholarship, the name Derphine is used of the small harbour 15 km. north of Chios town. The exact position of the ancient town and of the Athenian fortress had never been recorded, though a brief inspection of the site could not have left anyone long in doubt.²

¹ References in Stephanus of Byzantium, Harpokration, and Suidas echo Thucydides or each other, and add nothing new.

² Antiquities found in the area were described by Zolotas

in 'Ιστορία τῆς Χίου A. 1 308 f., 422, and cf. Madias, *Αιγίων* A. 2 120 ff., and Hunt, *BSA* xli. 49. Fustel de Coulanges in *Archives des missions scientifiques et littéraires* v (1856) 500 saw that it must be somewhere guarding the three ports.

In fact the acropolis by the harbour was first identified from air photographs in 1953 by Mr. W. G. Forrest, and soon confirmed by ground observation. In 1954 the writer, with the assistance of Mr. Forrest and Dr. and Mrs. M. Ventris, who drew the original plans, conducted limited excavations on the acropolis and adjacent hillside, and it is the results of this work which are published here. I am much indebted to Mr. Forrest for discussion of many points. The excavation was a *parergon* of the excavations by the British School at Athens in Chios 1952-5.

DESCRIPTION AND HISTORY OF THE SITE

The harbour of Delphinion (FIG. 2) is of the small, well-sheltered type which was most favoured by ancient ships, with both deep anchorage and shallows for beaching. It is of an odd shape, divided roughly into two by the projecting hill which carried the ancient town and fortress, and by a small island, called Tauros. The entrances to the harbour lie on either side of Tauros with a gap of 100 m. to its west, and just under 200 m. to its east. The western arm of the harbour is extremely shallow, but the eastern part shelves steeply down just off the present shore line. The two entrances face south. The waters of the harbour are well protected on all other sides by the barren hills which run straight into the sea. Hospitable beaches for ships lay on either side of the acropolis, in the northern and western recesses of the harbour.¹ Before describing the landward aspect we may briefly note the harbour's position on the island's coast (FIG. 1). The main town, Chios,² lies 15 km. to the south along a coastline rocky and exposed, but for one or two small inlets which have no beaches or hinterland to recommend them, and the seaboard of the plain around Chios town. There is, however, a good harbour immediately south of the hill which shelters the southern side of Delphinion harbour, where the modern town of Langada stands. The Langada harbour stands open to the east and, with its more easy accessibility by land, is better suited to modern shipping. This also explains why it, and not Derphine (Delphinion), is the centre of occupation in this area today.³ Approaching the Langada-Delphinion feature, which is in a way a great double harbour, shipping from the south passes the small island of A. Stephanos, 3 km. from Delphinion harbour entrance. Opposite, to the east, is the Erythraean peninsula and the southern extremity of the bay on which Erythrae stood. To the north the gap between Chios and the mainland is partly closed by the Oinoussai islands. The coastline north of Delphinion is on the whole rocky and inhospitable, and the next good anchorages on this coast are at Parpanda and Marmaron (Kardamyla) around the north-east tip of the island.⁴ As the channel between Chios and the mainland was the main north-south route for shipping along the Asia Minor coast, the strategic position of Delphinion, given command of the seas, is obvious.

The feature which helps to divide the harbour into two is a low rocky spur running approximately east-west, and ending beside the harbour in the well-defined hill which was the ancient acropolis (PLATES 3, 4a). South and west of it, behind the western arm of the harbour, lay a small area of low ground with, beyond it, the hill above Langada and, inland, the pass which carries the modern main road to the north. Immediately north-east of the acropolis is a broad flat valley, partly marsh, through which run a small brackish stream fed by a spring a little inland, and a broad river-bed which is generally dry. It seems certain that the coastline here was in antiquity farther inland, possibly by two or three hundred metres, thus isolating the acropolis further and making it more of a peninsula site; but it is impossible to tell where it

¹ Cf. Hunt, *op. cit.*

² On its harbour and extent in antiquity see *BSA* xlix.
123-8.

³ See below on its importance in the Middle Ages and later.

⁴ Cf. Hunt, *op. cit.* 50.

ran in the fifth century B.C. The broad valley forks a short distance from the harbour into a smaller one which runs west alongside the acropolis spur, and a deep valley with the main river-bed which runs north; the two are divided by a steep-sided rocky spur. Most of the low-lying land in these valleys, particularly along the northern valley and near the spring, is today

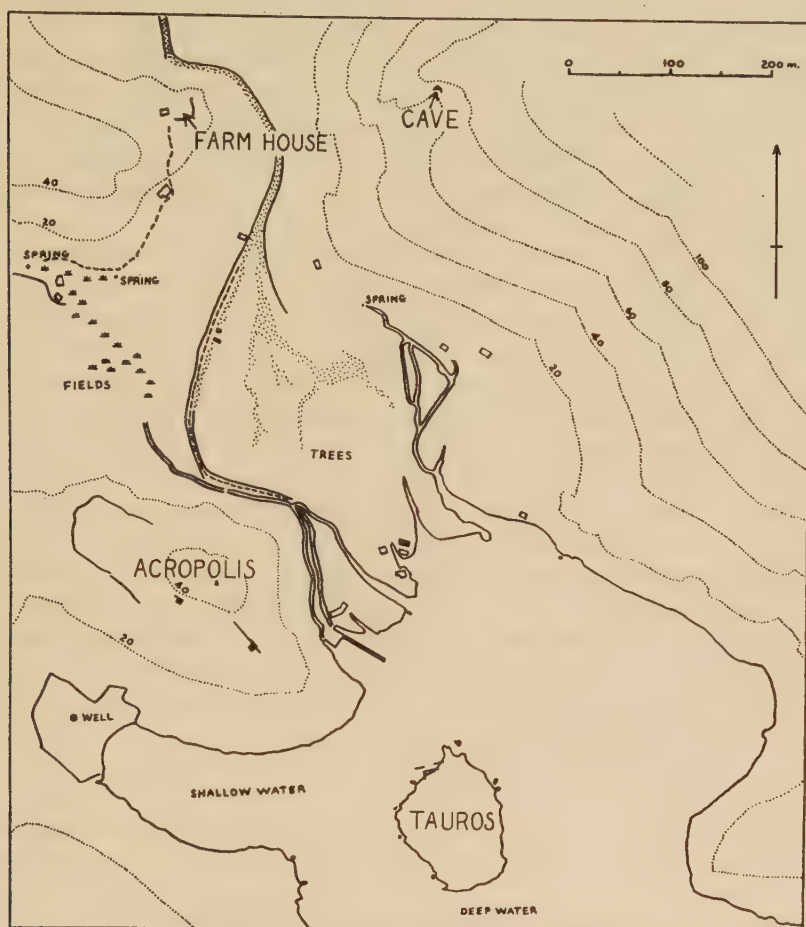


FIG. 2. THE DELPHINION HARBOUR AREA

green with vegetation and in part cultivated. In antiquity there was probably enough cultivable land to support a small community which could use the harbour, and the eroded terraces of the hillside around bear witness to the greater productivity of the area in the Middle Ages or earlier. Around the valley today there are about a dozen small houses, most of them uninhabited, a mill by the harbour, and a ruined mill near the spring.

The acropolis hill is of regular shape rising to about 45 m. at its summit. PLATES 3, 4a show its outline well. Its northern slopes are rocky, steep, in places very steep, and may in antiquity have been washed by the harbour waters. To the south the slope is gentle, and to the west there is only a slight depression dividing it from the continuation of the spur. The western half is the flatter and the more easily habitable. Today the only feature here is the maze of thick walls which limit the poor fields and few olive trees. It was this mass of stone, as well as the

surface pottery, which first indicated the position of the ancient town. A full description of the finds and remains there appears below.

This then was the site which the Athenians chose in 412 B.C. to fortify as a base for operations in and around the island. The stratagem of establishing a base on the borders of the enemy country (ἐπιτειχισμός) was of course no new one in the Peloponnesian War, having already been practised at Pylos by the Athenians, and at Dekelea by the Spartans only the year before. The reasons for the Athenian choice of Delphinion would be clear even had Thucydides not so neatly defined them. First, its defensibility on the landward side, with one weak point only at the saddle to the continuation of the ridge inland; secondly, its harbours, which were ideal for a battle fleet or store ships; and thirdly, its proximity to Chios town, which was only some three hours' march away by land, while ships at Delphinion could of course command the straits between the island and the mainland opposite.

Thucydides continues his account of the effect of the Athenians' presence in the island with a description of the difficulties faced by the Spartan 'governor' Pedaritos, and the depredations of Chios's large and rebellious slave population which was deserting to the enemy in large bands.¹ Pedaritos appealed to the Spartan admiral Astyochos, representing the Athenian fortress as still incomplete, though a greater circuit embracing both camp and ships was being constructed, στρατοπέδῳ καὶ ναυσὶν ἐρύματος μείζονος προσπεριβαλλομένου (viii. 40, 3). This extended circuit which was to embrace whatever part of the harbour was occupied by the fleet could only have run in one direction, to the south of the acropolis and around the recess of the western, shallower harbour. No sure signs of it remain and much of the original harbour here has silted up, but there are a number of large boulders forming a short wall-line at the south of the harbour (H on FIG. 3), which seem too massive for ordinary terrace or field walls, and which may therefore preserve part of the line of the Athenian 'long wall' to the sea. Pedaritos had eventually to report that the Athenians had finished their wall (viii. 55, 2) and he decided to attack Delphinion with his own guard and all available Chian forces. He succeeded in seizing part of the 'long wall' and a few ships, but the Athenians rallied, Pedaritos was killed,² and his force driven off with considerable loss.

For the end of the story we have to turn to Xenophon (*Hell.* i. 5, 15), who says that the Spartans captured Delphinion soon after the battle of Notion (in 407 B.C.); and Diodorus Siculus (xiii. 76, 3 f.) records the siege of the fortress by Kallikratidas, the submission of the 500 Athenians³ there, who left under truce, and his destruction of the walls (τὸ μὲν φρούριον παραλαβὼν κατέσκαψεν).

Part of a fortress wall line with small solid towers has been discovered on the acropolis at Delphinion (see below), and this can most plausibly be identified with the Athenian fortification. But the history of the site was hardly confined to this military episode, and from the pottery on the acropolis it is clear that a village stood there in the fifth century, and that occupation continued in the same place through the fourth and third centuries. At the end of

¹ For an inscription which may illustrate Chian treatment of the slaves who did not revolt, see Robert, *Études épigraphiques et philologiques* 118 ff.; Salač, *Eunomia* i. 1 ff. (his reading is incorrect); another fragment of this inscription has been identified.

² For his career in Chios see *RE* s.v. His mother, so Plutarch tells us (*Moralia* 241d), wrote to him in Chios suggesting that he should do better or not bother to come home.

³ This is the only direct reference to the size of the garrison and the numbers may not be excessive, even remembering additional allies and the revolted Chian slaves given

asylum there. We cannot be certain of the original strength of the garrison. Thucydides (viii. 30, 2) says that Strombichides, Onomakles, and Euktemon were in command of the striking force against Chios, which numbered 30 ships and some of the 1,000 men at Miletus, who were embarked on troopships. Three ships were lost in a chase which ended in a storm (viii. 34), and the main body went on to Lesbos, whence they returned to Chios and Delphinion (viii. 38, 2). Such a large force was intended for raids around the island and perhaps to establish the fortress, but not to form a permanent garrison there.

the spur which runs towards the sea immediately west of the acropolis is a prominent levelled platform on which stood fourth-century and Hellenistic farm buildings. With this continued occupation, easily understandable in view of the fertile valleys which lie west of the harbour, we may associate the only other ancient record of the site, which occurs in a mid-fourth century inscription.¹ This describes the conditions for renting property belonging to the phratry of the Klytidai, and refers to ἡ γῆ ἡ ἐν Δελφινίῳ ἡ τ[είως Κ]αυκασίωνος τοῦ Βασιλείδου. It is tempting to see in the farmhouse opposite the acropolis the home of one of the γένη, for it was a substantial structure. This association of what appears to be a large family farmhouse with a small village has many parallels in Chios in this period, for instance near Emporio and Pyrgi² in the south of the island, and at Viki³ in the north.

The name Delphinion suggests that Apollo Delphinios was worshipped here. There is no specific record of his cult on the island, but it is attested for Erythrae⁴ on the mainland opposite. Erythrae and Chios shared a number of place-names and cults, as might be expected if they were settled by a single wave of Greek immigrants and at one time; as one might also expect, there was little love lost between such close neighbours with overlapping interests. We found no trace of a sanctuary on the site, no fine pottery, and no squared blocks to suggest a monumental building, but whatever sanctuary there was may have been very simple. Figurines are said to have been found in the area,⁵ but these may be from tombs or even houses.

In the hill-side facing the acropolis from the north there is a cave, τοῦ Μόρου σπηλιάς, which Zolotas⁶ suggested might have been connected in some way with the cult; but although its entrance looks as if it has been artificially regularized, the cave can never have been easily accessible and has produced no antiquities.

There is no trace of later Roman occupation on the shore at Delphinion, but on Tauros, the island in the harbour, there are cemented walls which run into the sea on the west side (FIG. 3). Associated pottery is Late Roman of the sixth century A.D.,⁷ a period in which Chios seems to have prospered, to judge from the finds at Emporio in the south of the island.⁸ Whether the Arabs descended on Delphinion in the 660's we cannot say. There could have been little there to attract them except the harbour facilities. There are reports that coins have been found on Tauros, and a pig's and a bull's head,⁹ which sounds suspiciously like an aetiological myth, though its existence does seem attested.

In yet later times the name Delphinion survived as Porto Delphino, becoming corrupted into Porto del Phino, Porto Fino, Port Fin. But although the name survived in this way there seem to be some grounds for believing that it was not only applied to the small double harbour and ancient acropolis of Delphinion. A late fifteenth- or early sixteenth-century portulan¹⁰ (a sort of early Mediterranean Pilot), which derives from earlier medieval mariners' guides,

¹ Haussollier, *BCH* iii. 242 ff., 244 A, lines 8, 9; Wilhelm, *Öjh* xxviii. 197 ff. The inscription was found near Kardamyla, which is even today the administrative centre for the Delphinion valley, not Langada, which is nearer.

² At Pindakas (preliminary report in *JHS* lxxv, Suppl. 21), and a similar site near Pyrgi.

³ The remains there were described by Zolotas (op. cit. 418) and Hunt (op. cit. 43 f.). The pottery on the surface is plentiful and all of it is coarse, including Hellenistic painted tile and a stamped amphora handle. The site seems to comprise a complex of substantial farm buildings in a prominent and commanding position above a fertile valley, similar to that of the farmhouse at Delphinion. Inscriptions from Viki in *Αθηνα* xx. 263, no. 145; *Hesp.* xvi. 88.

⁴ Wilamowitz, *Nordionische Steine* 16. Also in Ionia at

Miletus (von Gerkan in *Kleinasion und Byzanz* 35 ff.), and in the Ionian colonies at Olbia and Massilia.

⁵ Madias, op. cit.; Kanellakes in *Περίελα-Αλυσίων* 1896, 237 ff., mentions tombs. In Kardamyla in 1954 I was told of terracottas found 'by the sea' at Derphine, even of columns in the water. Aqualung divers found a large number of Late Roman amphorae in the sea just off the south-east side of Tauros, but no other antiquities in the waters of the harbour.

⁶ Op. cit. 308.

⁷ Rims of Late Roman C bowls, and fragments of cylindrical amphorae of the type found at Emporio.

⁸ Preliminary reports in *JHS* lxxiv. 163; lxxv, Suppl.

21-23.

⁹ Zolotas, op. cit. 422.

¹⁰ Delatte, *Les Portulans grecs* 116 f.

describes τὸ Δερφίνι, καλοὶ λιμιόνας, καὶ ἔχει στὸ νησί ἅπάνω νερό. The description is echoed in many travellers' accounts in the succeeding centuries, most of which mention the island which makes two entrances to the harbour, and the fact that water can be got on it, and also remark on a tower and lighthouse there,¹ its fertile valley, and the river Helusano.² All this

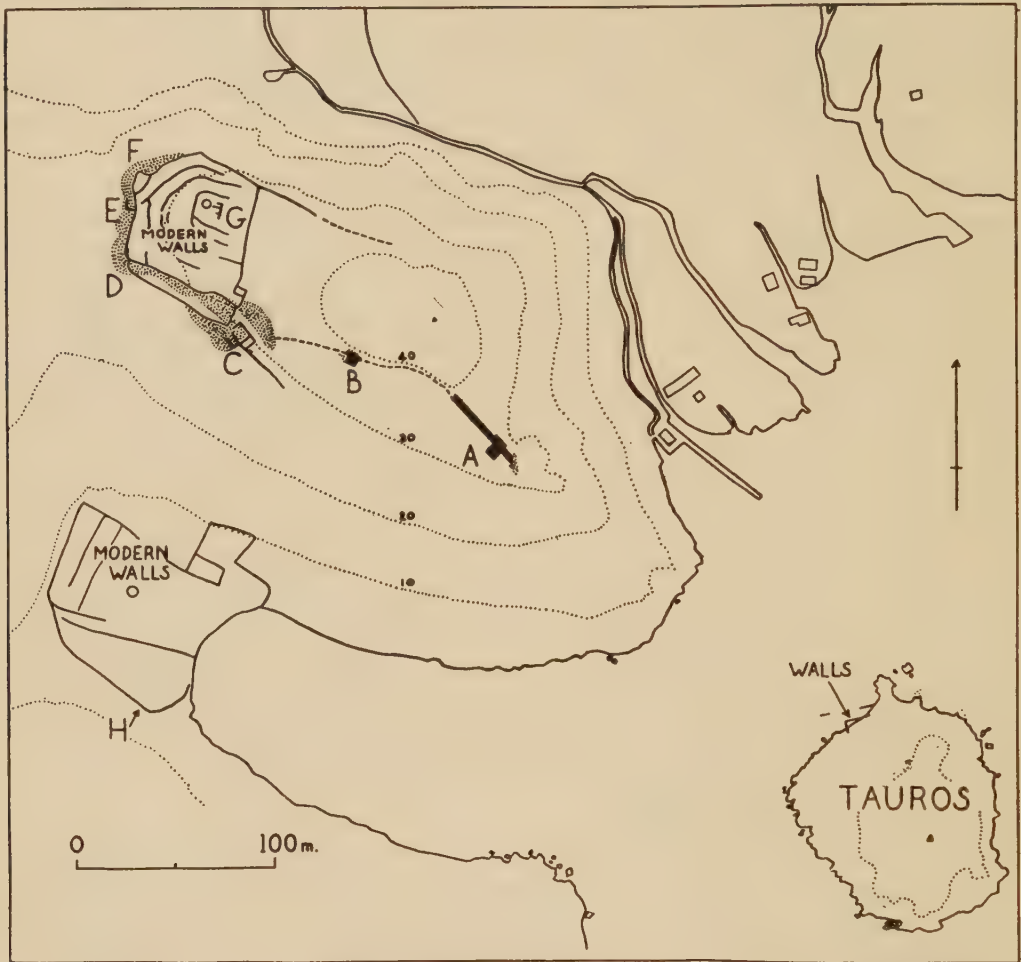


FIG. 3. THE ACROPOLIS AT DELPHINION

approximately suits Delphinion and the island Tauros, but not exactly, for Tauros has no water and Delphinion no medieval antiquities, certainly none to suggest the Porto Delphino which was considered a better haven than Chios town in the winter months.³ De Nicolay, who visited the island of Chios in the mid-sixteenth century, is a little more explicit and makes it clear that the island which divides the entrances to the harbour is A. Stephanos (see FIG. 1).⁴

¹ e.g. the travellers quoted in Argenti and Kyriakides, 'Ἡ Χίος παρὰ τοῖς Γεωγράφοις καὶ Περιηγήταις' (hereafter abbreviated ΧΓΠ) i. 13, 30, 127, 418, 471, 550; ii. 862. On traditions of pirate raids there see Zolotas, *op. cit.* 442-4.

² Sometimes Bellofano (cf. Porcacchi in ΧΓΠ i. 72 f.), a

corruption which misled Pococke for a time into identifying the site as that of ancient Phanai (*ibid.* ii. 679).

³ Cf. ΧΓΠ i. 559; ii. 846, and Hunt, *op. cit.* 49.

⁴ Cf. ΧΓΠ i. 60, 68, Dapper's account of a visit in 1688 (*ibid.* 418), and Biron's in 1605: 'le Port Dauphin, très beau et bon pour toute sorte de vaisseaux, à l'entré duquel est un

The island still has a good well on it, and its position in the entrance to a busy port and on the main north-south sea lane is well illustrated by the evidence of classical and medieval wrecks discovered there by a team of aqualung divers in 1954. It also more than once attracted the attention of visitors to Porto Delphino. This identification, as well as the less reliable evidence of many early travellers' maps, makes it clear that the medieval Porto Delphino was not simply the small double harbour of Delphinion, nor even the larger one formed by Langada and Delphinion, but a more extensive complex which included the smaller southern anchorage which can be approached by passing to the south of A. Stephanos. William Heather's map for *The New Mediterranean Pilot* of 1802¹ shows this clearly, though the island is called St. George, as it is occasionally elsewhere. The map differentiates the 'Little Port' to the south, and the 'Great Port Fin' which embraces both Langada and Delphinion. Where he marks a village stands the modern town of Langada, and here too must have been the main anchorage and quayside of Porto Delphino. Langada itself is rich in medieval remains, which are still often come upon in the fields of its fertile valley.² Some time in the last century, no doubt after the massacres and depopulation of 1822, the name Porto Delphino was replaced by that of Langada, while ancient Delphinion resumed her identity as Derphine.³

THE ACROPOLIS EXCAVATION

Most of the ancient remains on the acropolis hill were apparent on the surface, and little excavation was required to determine measurements and clarify certain features (FIG. 3). This is not because the remains are well preserved, but because the heavy erosion on the hill has carried away nearly all the earth, and though many rubble walls went with it, still the tumble or lower stones of the thicker walls are visible on the bare rocky surface. Masses of broken coarse pottery and tiles also attested occupation in the classical period.

On the west part of the acropolis heavy field walls, constructed with stones from ancient walls, effectively mask the original wall-lines, though much can be guessed of them, as we shall see. At the south-east there are no such fields. A stretch of heavy wall could be traced for some 50 m. on the surface here, and included a rectangular tower (Tower A on FIG. 3). The line of the same wall was picked up 50 m. farther west where another tower (Tower B) was apparent. Trenches across the wall and in the neighbourhood of the towers revealed that the footings of the wall were preserved in places to a height of 0.50 m. The thickness of the wall averaged 2.10 m. and the construction was of rough stones quarried from the hill with no attempt at facing. There is hardly a stone in it which could not have been moved by one man, and everything points to hasty building. Such a wall could hardly have stood higher than about 3.0 m. The towers are constructed in the same way. Tower A is the better preserved, with part of its north-west face (PLATE 4c) standing nearly 1 metre above bedrock. It measures exactly 5.0 m. square, and is solid, as it was no doubt to its full height. The back of the wall at this point is wider by 1.60 m., but there are no defined ends or corners to this thickening, which must represent a narrow ramp giving access to the top of the wall and the tower. Tower B is 4.80 m. square and is also solid; the back of the wall and its thickness could not be determined here.

The excavations at these points were singularly unrewarding in finds and stratigraphy. Below the shallow topsoil and wall tumble was only clayey earth on and in the crevices of the

Escueil ou Isolette appelé St. Estienne, où est une grosse tour, comme se voit en plusieurs lieux du village marin autour de la dicte Isle pour descouvrir les Corsaires, qui souvent sont par ces lieux' (ibid. 132).

¹ Reproduced in ΧΓΠ ii, pl. 52, opposite p. 863.

² Cf. Zolotas, op. cit. 422. An inscription from Langada in 'Αθήνα xx. 257, no. 122.

³ In 1823 Depping found the harbour still in use, though 'Delphinium a disparu' (ΧΓΠ ii. 1070).

bedrock. No ancient ground-level could be determined, and the only pottery recovered was in the upper level and in no way more intimately associated with the wall; however, none of the pottery in this area was later than the fifth century B.C. Despite the lack of direct dating evidence there can be little hesitation, in the light of the site's recorded history, in identifying this fortification with that thrown up by the Athenians in 412 B.C. and subsequently destroyed by the Spartans.

The line of the rest of the wall can be largely supplied by guesswork and surface observation. The outer field walls in the west are built on a heavy tumble of rough stones which lies on an appropriate contour for the continuation of the wall-line. At C on FIG. 3 a short and isolated stretch of wall seems ancient, and may preserve part of the main wall-line or the outer edge of a tower. However, a heavy tumble of stone some 10 metres higher up the slope suggests that the wall or a tower stood here also, and it may be that at this point there was an entrance formed by an overlap in the wall-line, and facing south-east. At D, E, and F other masses of fallen stone suggest the positions of other towers, and at E the outline can be clearly made out. The concentration of towers here is understandable as this is the weakest point in the circuit, opposite the saddle linking the acropolis to the rest of the spur inland. On the north edge of the hill the outer field wall and the broken line on the plan show where the wall could have run, but there is no tumble here as the slope is steep, in places precipitous, and all would have fallen away. If the sea in fact ran so far inland as to wash this side of the hill there would have been no need for a fortification wall, at least along the north-western edge.

It is within the modern field walls on the western part of the acropolis that the evidence of occupation is clearest, and even some house walls apparent. One trench was dug in the hope of securing dating evidence for at least some of the walls, but the surviving earth is too shallow above the rock, which in fact is exposed over much of the area, and what soil there is has been thoroughly disturbed by cultivation. The pottery, which was all coarse, dates from the early fifth century B.C. down to the third or second centuries. Nothing earlier was found either on the surface or in digging, and the Delphinion village may therefore be entirely of the classical period (as are others around the island), and perhaps only occupied after the Persian War. The name Delphinion implies the cult of Apollo Delphinios, which one would expect to be a cult brought over by the earliest Ionian settlers, if not even some form of survival from the Bronze Age. There is, however, no objection to the idea that the cult was transplanted, perhaps from Chios town, when the new settlement arose, and there may indeed have been no occupation at Delphinion earlier than the fifth century B.C.¹ That this date accords with the Chian gift of the Great Altar to Delphi may also be significant.

At point G on the plan a stretch of fairly well faced polygonal wall 7.4 m. long, but hardly more than one block deep, appeared on the surface. It has no back, being set against the rising slope, and it may have been as much a building terrace as the footing to a free-standing wall of a house. An area 3.0 m. square before its face was chosen for excavation. The depth of earth was at no point more than 0.40 m., and over most of the trench considerably less. No ancient floor-level was preserved, nor was any pottery recovered in significant context with the walls. In the trench two wall footings were found running at right angles to the polygonal wall. The more northerly wall was 0.55 m. in width, and the other 0.65 m., but this difference may be illusory, as only the lowest stones were found, and these not carefully laid. The two walls lay

¹ Defradas, *Les Thèmes de la propagande delphique* 74, sees in the Delphinia of the Greek world evidence of the radiation of the cult from Crete (Knossos) in the 9th and 8th centuries. Those in Chios and Erythrae (?) probably came with the Greek settlers from the west, and in view of the legendary

and historical connexions with Euboea the Delphinion at Chalcis (and at Oropos, a *ἱερὸς λιμὴν*) may be more relevant: *RE* s.v. 'Delphinion'; a new dedication from Chalcis in *BCH* lxxvii. 217.

close together with only 0.30 m. clear space between them, and so may be adjacent house-walls. A small cutting determined that the second wall continued for a distance of at least 5 m. from the polygonal wall, and another cutting to the south revealed a third wall, running parallel to the others and at 2 m. clear interval from them. The first wall is somewhat different in construction from the other two, being made of larger flat stones, and including fragments of classical tile and pithos. A lead sail-ring and weight found just to the north of it antedate its construction.

This was the only area within the walls which was investigated. It is unlikely that further excavation there would reveal more than a broken complex of similar walls, probably even less well preserved and less clearly related to each other; hopes of a preserved ancient floor-level seem most slight. The tile fragments found on the surface are of the usual classical type met in east Greece and many were painted.¹ The overall picture is of a small, probably fairly closely packed village, concentrated on the western half of the hill, and occupied from about 500 B.C. into Hellenistic times, with an interval of Athenian occupation entailing the building and subsequent destruction of the fortress wall at the end of the fifth century.

THE FARMHOUSE EXCAVATION

At the end of the spur which divides the broad valley north of the acropolis (FIG. 2) and on its north-east side overlooking the main river-bed some 30 m. below, stands a conspicuous outcrop of rock with a flat top (PLATE 3, FIG. 4). The platform measures 35 m. long (E.-W.) by between 10 and 20 m. wide, slopes slightly down from north to south, and is divided in half by a rocky feature at the centre north. At the extreme east stand the ruins of a modern one-roomed building with a small enclosure, and behind it the hill-side rises rocky and barren. The approach is from the direction of the acropolis along a curving path which skirts the end of the spur. At various points this path is terraced by heavy stones, many of which must be ancient.

Surface observation revealed traces of one heavy and several light walls on the flat platform, which had itself been artificially terraced by rubble retaining walls at points where the rock fell away sharply. The rock was showing on the surface at many points, especially in the eastern half of the platform, and little excavation was required to determine the position of what remained of the ancient walls.

In the western part the main feature proved to be a heavy wall running north-south, which formed the eastern side of a house. The outlines of two rooms with doorways at the north of the house became clear, as well as a doorway through the main eastern wall, where its heavy blocks gave place to narrower footings. In the southern part of the house the other wall which appears in two places could not be more closely related within the building. The western edge of the building could not be determined, and excavation within and around the modern building yielded nothing.

In construction the most carefully built of the walls was the heavy eastern wall, which was built on both faces of roughly squared blocks, with a rubble filling. Part of one course of these upright wall blocks was preserved to the north, where they stand on flat slabs; the width of the wall is 1.20 m. The other wall footings, about 0.70 m. wide, were of well laid, though not dressed, medium stones, for which the bedrock had in places been cut back, though for the most part the walls are founded on a fill of earth and stones. Excavation showed that the original floor-level of the house has been disturbed by modern attempts at cultivation, although around the main doorway in the eastern wall a shallow strew of plaster fragments may indicate the floor. These ran to the level of, though not over, the narrower footings of the doorway, whose original

¹ Cf. the tiles found in the Kofina excavations by Chios town, *BSA* xlix. 170 f.

threshold is missing. Elsewhere the only distinction in level was between the disturbed topsoil and the earth and stone fill below the original house floor. This fill contains pottery and tile which comes well down into the Hellenistic period in date, and makes it unlikely that the building was constructed before the second century B.C., though it was clearly replacing another or

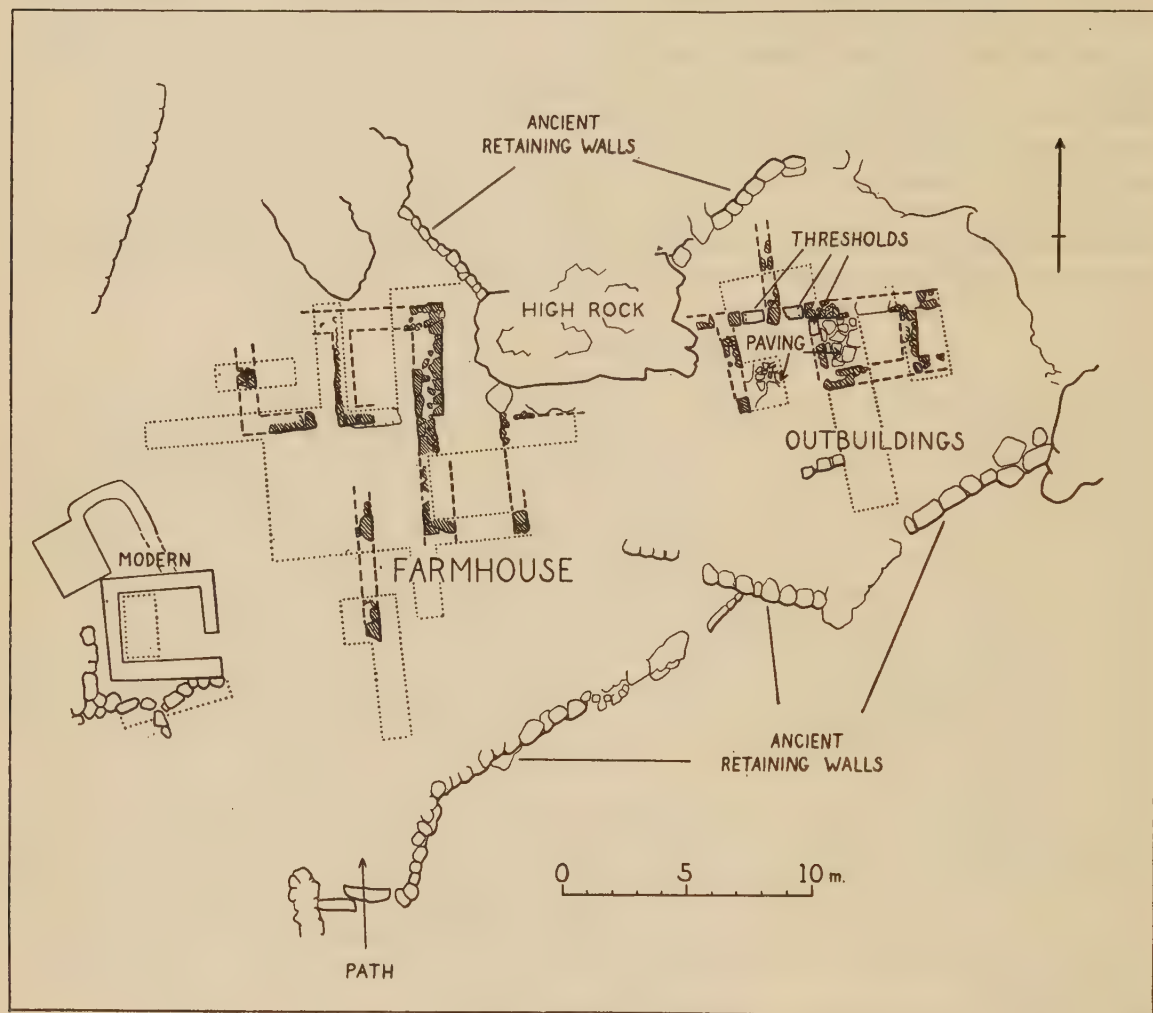


FIG. 4. THE FARMHOUSE AT DELPHINION

others there. None of the pottery found could be dated earlier than the fourth century B.C., which must therefore be taken as the earliest date for building on the platform. The tile fragments were of the usual type and most were painted.

From the pottery and other finds associated with the building it was clearly secular, most probably a farmhouse, and of some importance, to judge from the pretensions of part of its construction. The only other architectural feature recovered from it is the fragment of a white limestone base (FIG. 5) which may have been the foot of a pilaster or door-jamb.

If this is a farmhouse, the structures on the other (eastern) half of the platform are best called

'outbuildings'. Access to them from the farmhouse was blocked in part by another, lighter north-south wall which seems to form a passage-way to the farmhouse door. Cuttings for yet another light wall were also observed against the rock which divides the feature at the north. To the east the outbuildings are a complex of small rooms or stores, the only complete one having inner dimensions of 3 by 2 metres. Both this room and another to its west were roughly paved with stone slabs. Exceedingly little is preserved of the wall footings, which are of small stones and vary in width from 0.50 to 0.70 m.; here and there the rock has been cut back for them. Three thresholds are preserved *in situ*, each with cuttings at one side only, presumably for single-leaf doors. In so far as any intelligible plan can be guessed at, it appears that the westernmost paving belongs to a small open yard with rooms opening from it, one of them also paved.

The date of the outbuildings is impossible to determine stratigraphically. In the most eastern room was found the upper part of a storage jar with vertical combed striations within, which is possibly of Roman date. One tile fragment also bore a finger-grooved arc in its bottom corner and may be at least as late. All other pottery and tile are, however, Hellenistic, and it seems most probable that these foundations are to be associated with the farmhouse building, whatever later structures there may have been. No other certainly Roman objects were found on the platform. None of the pottery on the pavings could be regarded as *in situ* on a floor, as the slabs were for the most part barely covered by shallow turf. Scraps of indeterminate tile were found beneath the paving slabs, and a tile fragment found on the surface near by bore a stamped device of the Chian sphinx and amphora.

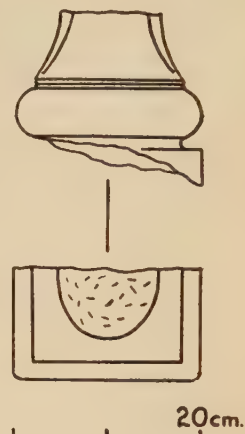


FIG. 5. A LIMESTONE ARCHITECTURAL FRAGMENT FROM THE FARMHOUSE

THE FINDS

Pottery. Most of the pottery found was coarse and undecorated. Amphora feet of known types are recorded here but not illustrated, as the more interesting examples will be included eventually in the publication of pottery from the excavations at Emporio. To Miss V. Grace I am indebted for notes on the stamped handles. Measurements are in centimetres.

1. Two-handed cup (FIG. 6). The base is missing. H. preserved 6.9 (to rim). Pink fabric fired grey in part. Dull red paint on the surface. Second century B.C., cf. Thompson, *Hesp.* iii. 434 ff., fig. 118 D17. From the fill below the farmhouse floor.

2. Cup (FIG. 6). The handles are not preserved. H. 6.0. Pink fabric fired or burned grey in parts. Dull paint preserved around the lip. Same provenance as 1.

3. Cup (FIG. 6). The foot only is preserved. Badly burned with no paint preserved. Farmhouse surface.

4. Miniature one-handed cup (FIG. 8). Pink fabric. From the fill below the farmhouse floor. This is the only object found which has no obvious domestic purpose, though it may be from a domestic shrine.

5. Bowl. Foot missing. Radius at rim 6.3. Cf. *BSA* xlix. 178, fig. 15, 193. Poor red-brown paint. Third century B.C. Acropolis, near Tower B, surface.

6. Fragment of bowl (PLATE 4d). H. 5.5. Moulded leaf pattern and rosettes beneath an ovolo frieze. Red-brown fabric with little mica. Perhaps second century B.C.; the

fabric may be Chian and the pattern is commonplace. Farmhouse surface.

7. Fragment of lid (FIG. 6). Pinkish-grey fabric. Acropolis surface.

8. Rim of a bowl (FIG. 6, PLATE 4e). Radius c. 25.0. Grooved above, and with an impressed ovolo pattern on the face. Pink fabric with dull brown paint over the lip and for 4.0 within the bowl. The impressed decoration imitates finer Hellenistic styles elsewhere in the Greek world, e.g. the 'Hellenistic Pergamene'. For the profile compare bowls in Athens (Thompson, op. cit. 468-70). Probably third century. Farmhouse surface.

9. Basin rim (FIG. 6). Radius at rim 15.0. One upright loop handle is preserved. Pink fabric. Farmhouse surface.

10. Pithos fragments (FIG. 7). Gritty pink fabric. Decorated with groups of three ridges in horizontal bands. A lead mending clamp is preserved in one of the fragments. From the fill below the farmhouse floor.

11. Storage jar (FIG. 7). The upper part only is preserved. Radius at rim 20.0. Fine buff-pink fabric. The interior is

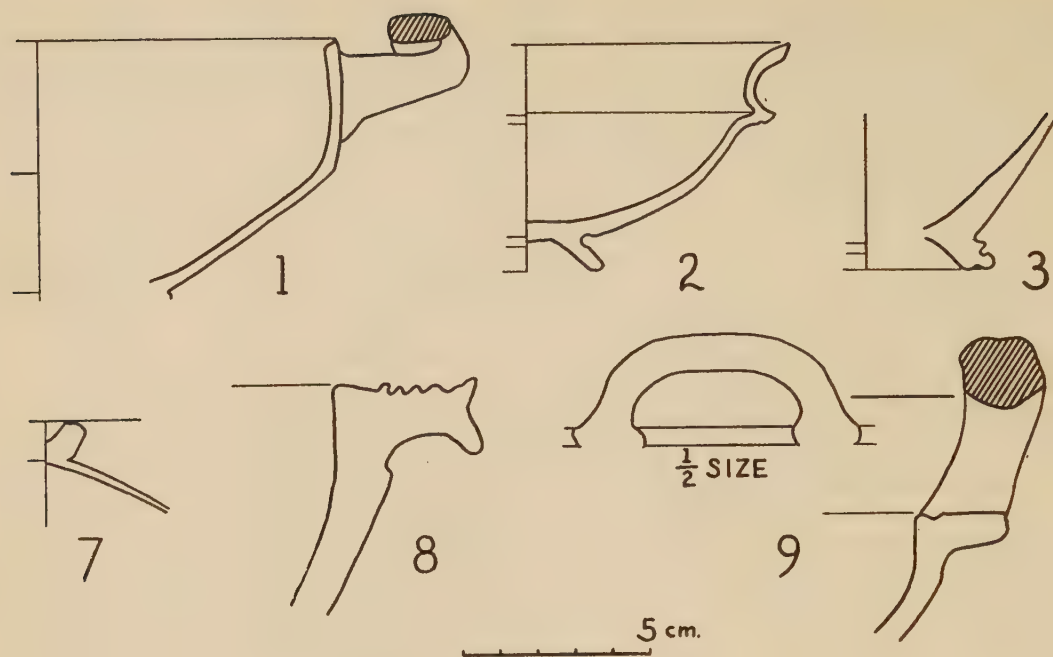


FIG. 6. POTTERY FROM DELPHINION

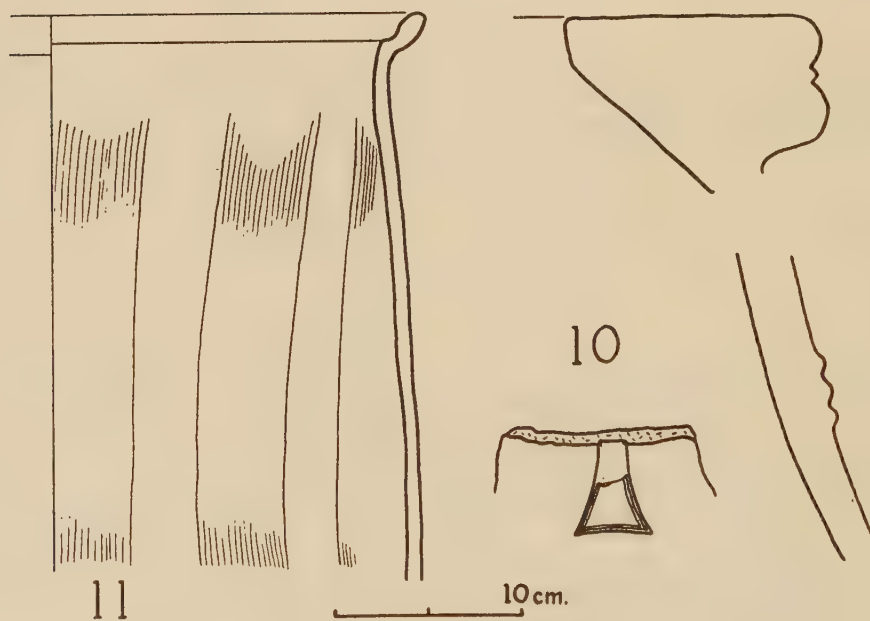


FIG. 7. POTTERY FROM DELPHINION

decorated with vertical bands of combing. Possibly Roman. From the easternmost room of the outbuildings.

12. Amphorae. Nearly all the recognizable amphora feet were Chian, and are therefore datable. For the most recent

274*f* (? Mende), 274*p* (this, with 274*n* and *o*, I believe to be variations of the Chian series). From the farmhouse complex come one Coan and examples of *ibid.*, 278, 274*f* (twice) and *h* (with the wall joining the toe at a sharper angle and

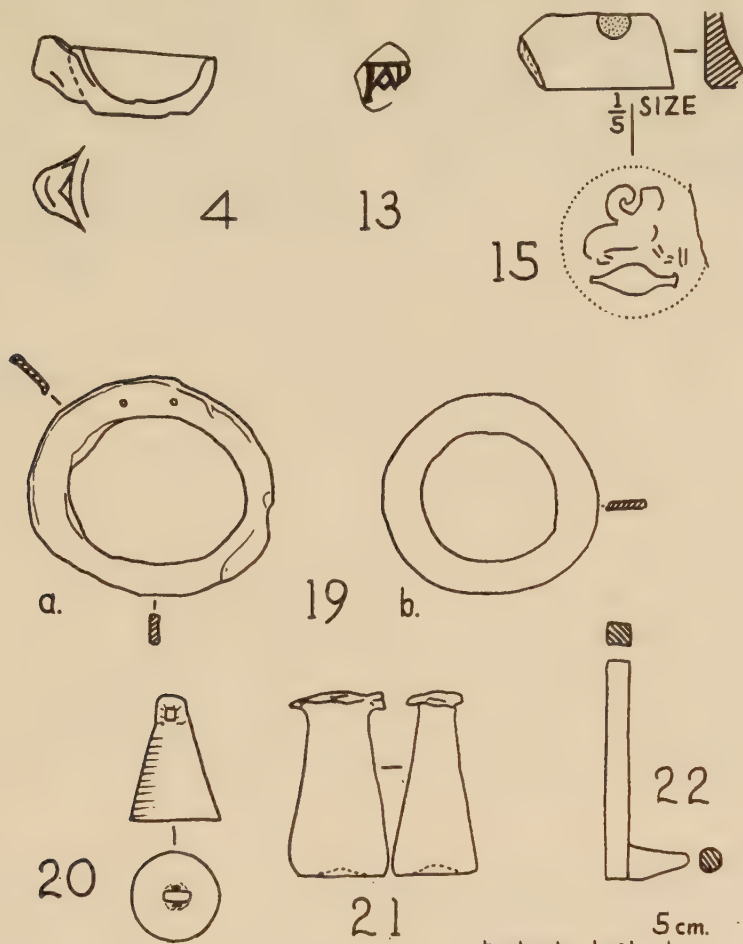


FIG. 8. OTHER FINDS FROM DELPHINION

discussion of them see Anderson, *BSA* xlix. 168–70 and the illustrations there. Chian feet from the acropolis range in date from the early fifth century to the third. From the farmhouse complex only one of the fourth and one of the third century were recovered, both below the farmhouse floor. Recognizable imported amphora fragments from the acropolis include Coan (one), and one each of unidentified types illustrated by Anderson, *ibid.* 176, fig. 10, 182 bis,

without the light bulge). The last all from beneath the farmhouse floor.

13. Stamped amphora handle. Chian, second century B.C., with a monogram device (FIG. 8). From the fill below the farmhouse floor.

14. Stamped amphora handle. Rhodian, mid-third century B.C. Μ[έν]το[ρος] | Υ[ακ]ίνθ[ος]. Acropolis surface.

Other finds. These are domestic or nautical, as one might expect in a community of this type. There are no weapons.

15. Fragment of stamped tile (FIG. 8). The surface of the gritty red clay is badly worn. The stamped device in a circle is a sphinx squatting above a wine amphora, the

elements of the well-known Chian crest, though on coins the amphora regularly stands before the sphinx when both appear on the same face. From the surface by the outbuildings.

16. Loomweight. Pinched type with single suspension hole, cf. *BSA* xlix. 171, nos. 373-5, fig. 22. Farmhouse surface.

17. Loomweight. Circular type with flattened base and two suspension-holes, cf. *ibid.* 172, nos. 376-8, fig. 22. Farmhouse surface.

18. Loomweights. Three of the pyramidal type with rectangular section. Two have two suspension-holes, one only one. Farmhouse surface.

19. Lead rings (FIG. 8). Both are flat and crudely fashioned. (a) is from the farmhouse surface, (b) from the acropolis houses trench. These may be sail-rings.

20. Lead weight (FIG. 8). From the acropolis houses trench, with **19b**.

21. Pyramidal lead object with rectangular section and flattened top (FIG. 8). Cf. *EADéllos* xviii. 159, pl. 56, 444, 4-7; *Hesp.* suppl. vii. 79, 94, fig. 42. Outbuildings surface.

22. Lead clamp (FIG. 8). Presumably an unused clamp of the type employed to mend pithoi and coarse jars, cf. **10** above. Outbuildings surface.

23. Nails. A bronze nail 7.0 long with a circular head 1.1 across, and the circular head of an iron nail, 3.7 across. Farmhouse surface.

24. Fragment of a stone grinder. Parallel striations on the flat surface of buff-grey stone. Farmhouse surface.

JOHN BOARDMAN

CHIAN AND NAUCRATITE

THE fine white-slipped pottery decorated in a lively East Greek style which was first found in quantity at Naucratis in Egypt was soon dubbed 'Naucratis' and considered the local product of Greek craftsmen.¹ Subsequent excavations on the island of Chios showed that the same pottery and the same techniques were known there from Late Geometric times,² long before the Greek settlement at Naucratis, and more recent excavations there have made the Chian character of the pottery even clearer, and have carried the story on into Hellenistic times.³ The pottery was promptly therefore rechristened 'Chian'.⁴ Dissenting voices have, however, been raised in support of the theory that Chian daughter-factories in Naucratis produced fine pottery for dedication there,⁵ particularly those vases embellished with inscriptions which had been painted before their firing and which named both dedicator and deity. This factor has complicated the issue far more than the Arkesilas Vase did the similar problem of 'Cyrenaic' and Laconian vases, which was neatly solved by the British excavations at Sparta.⁶ But there are also other complicating factors, some of which have not been openly discussed as yet, which it is my purpose to record here. In doing so I freely admit that there may well be others that have not occurred to me, and that there are some problems capable of solution which I have left open because I lack the means to their solution. I should also admit that in the course of handling and working on pottery from Chios and Naucratis I have come to hold in some favour the view that Chians made vases in Naucratis as well as in Chios, and as a result this attitude may have coloured my remarks below, although in fairness I have tried to anticipate some of the obvious objections to each point. The discovery of kilns or even identification of the clay beds in Egypt could answer the question once for all, and a thorough scientific analysis of enough of the material might help. Failing any of these the following speculation is permissible, and even if it serves only to confuse the issue further, it seems better that as many as possible of the factors contributing to the confusion should be stated. I have occasionally below wandered from the problem to discuss more generally the ceramic interest and record of Chios in Naucratis.

The Fabric

The range of colour in the fabric of the vases has been described fully by Miss Price, and the similarity of clay in specimens from Chios and Naucratis remarked.⁷ After handling a considerable quantity of pottery excavated on Chios I was able to study and handle the rich collection from Naucratis in the British Museum, and was immediately struck by the fact that though the Chios fabric was uniformly pink, a great number of the Naucratis sherds were of a brown or grey fabric in varying shades. The difference is noteworthy and may in fact imply that

I am deeply indebted to Mr. J. M. Cook, Mr. R. M. Cook, Mr. A. G. Woodhead, Prof. R. J. Hopper, and Mr. W. G. Forrest for reading this paper and suggesting emendations, some of which I have incorporated. They are of course in no way responsible for, nor do they necessarily share, the opinions expressed here. J. B.

¹ Fulllest discussions of the pottery are by E. Price, *JHS* xlv. 205 ff., *Classification des céramiques* 'East Greek Pottery' 15 ff., and R. M. Cook, *BSA* xlv. 154 ff.

² At Kato Phana by Kourouniotes, *Adelt* i. 78 ff. and ii. 196 ff., and by W. Lamb, *BSA* xxxv. 158 ff.

³ At Kophina by Chios town, Anderson, *BSA* xlix. 128 ff. The excavations at Emporio in south Chios have afforded a rich series of stratified groups of Chian pottery from the eighth century B.C. on.

⁴ Or 'Chiot': it seems simpler to use the one adjectival form 'Chian' for both pots and people.

⁵ For: E. Homann-Wedeking, *Archaische Vasenornamentik* 28, *AM* lxv. 28 f., and von Bissing, *Bull. Soc. Arch. Alex.* xii (39) 46 f. *Against*: R. M. Cook, *JHS* lvii. 228, lviii. 266, *BSA* xlv. 154.

⁶ Lane, *BSA* xxxiv. 182 ff.; Rumpf summarizes, *Muz* 54.

⁷ Price, *op. cit.* 206; Cook, *JHS* lviii. 266.

different clay beds were involved. This seems on the whole unlikely to be the case; it is not a major factor in the Chian-Naucratite problem, and in any case could be made clear by adequate analysis of enough of the material. The grey certainly looks somewhat un-Greek, and is very similar to the fabric of the undoubted Greco-Egyptian figurines which must have been made in Lower Egypt. G. Welter, who had some experience with Egyptian ceramics, expressed the opinion¹ that the colour and quality of the clay in Naucratis was quite consistent with that known in the Nile Delta. On the other hand Professor Wace assures me that there is nothing there fit for anything better than tiles. Good potter's clay seems always to have been scarce in Lower Egypt, though Athenaeus' table-companion says of his host's home town (Ath. xi. 480e): πολλοὶ δ' ἐν τῇ Ναυκράτει κεραμεῖς· ἅφ' ὧν καὶ ἡ πλησίον τῶν κεραμείων πύλη Κεραμική καλεῖται, and Petrie found a Roman terracotta factory there.² Another explanation of the grey is that it is the result of the firing. The core of the walls of Chian wine amphorae is often greyish in contrast with the surface pink, and possibly the heavy slip on the archaic vases contributed to the similar discoloration by reduction of the fabric beneath. In that case the colour difference may be one of technique rather than clay bed, and none the less real for that. This may not be the end of the story, for although the Naucratis grey is found in some fine archaic fragments on Chios, the brown is not; in fact the brown resembles that of some of the other East Greek pottery from Naucratis, and may bring into question the existence of Greek potters other than Chians in Egypt.³ The slip itself on the archaic vases in question seems identical in Chios and in Naucratis. Argument from differences in clay colour in archaic Greek pottery is, however, fraught with difficulty.

If the fabric is in fact uniform, as appears possible, though still far from certain, and if a Chian pottery in Naucratis is to remain a postulate, the clay used must have been imported from Chios.⁴ In this there seems to be no real difficulty. A little would go a long way in a pottery which produced only small, thin-walled vases for votive offerings, and which would hardly accept or execute orders for coarse jars in the precious imported clay. Economically it would remain a sound venture for an enterprising potter to import the finest clay and slip, which would be used only for luxury or novelty wares. As Professor Hopper has pointed out to me, it might well have come to Egypt as ballast in the grain ships.

The Inscriptions

Many of the Naucratis vases bear painted inscriptions, and though all are fragmentary it is clear that nearly all are dedicatory and name both worshipper and deity. These have been studied in detail by R. M. Cook and A. G. Woodhead,⁵ who have distinguished different 'writers'

¹ To Homann-Wedeking, *AM* lxx. 29, n. 2; and cf. Mallet, quoted by Price in *JHS* xlv. 206.

² *Naukratis* i. 45.

³ For the attempt to identify a Milesian pottery see von Bissing, op. cit. 42. It may be significant that the Clazomenian vases by the Petrie Painter (Cook, *BSA* xlvii. 128-30) have all so far been found in Egypt. The situlae were probably made there (*CVA* British Museum, viii. 32) and cf. *JHS* lvii. 237.

⁴ To suggest, as does Homann-Wedeking (*AM* lxx. 28 f.), that a third centre might have supplied both Chios and Naucratis with clay seems unnecessarily complicated.

⁵ In *BSA* xlvii. 159 ff. I refer here to individual inscriptions in their catalogue (ibid. 165-70), thus—CW no. 10, &c. Having recently been able to study briefly the inscribed pottery in Greece, London, and Oxford I would like to offer here one or two emendations and additions. CW no. 9

is by the 'A. 1 writer'; nos. 38 and 42 are of the same vase; no. 53 reads]αφο[; no. 66 reads]νησυ[; no. 106 reads]σανε[; no. 111 reads]θηκε[; no. 118 reads]ανε[; no. 165 reads]μεα[; no. 170, the two fragments cannot be of the same vase; no. 187 is upside-down and should read]ορχχ[, for ἀνέθηκε]ν ὁ Χί[ος, the *iota* being crossed as a *chi* by mistake; cf. no. 46, which is also low on the wall of a kantharos; no. 224, the two fragments are probably not of the same vase; no. 225 reads]ηκενο[. Other scraps in the British Museum have]διτλ[(1924.12-1.707),]θηκεν[(—, 732),]ηκε[(—, 758),]τιαφ[(—, 779),]σιψ[(—, 793). There are also Reading 26, ii. 59]ον[(*CVA* i, pl. 550, 1) and Dublin University College 4008]ανεθη[by the 'M. writer'. There are several from the Emporio excavations in Chios. On shape-identifications see below, pp. 57f., nn. 5 and 1 (p. 58).

to whom the inscriptions may be attributed. An aid to attribution is the apparent 'correspondence between the names of the dedicators and the hands that wrote the dedications'. Why the dedicators should be so selective in laying their orders for votives or the Chian Kerameikos so complex seems hard to fathom. But when we note that the same 'writer' tends to write not only the same formula in the same style for the same dedicator, but also on vases of the same type and for the same deity, we may suspect that the votives were ordered, made, and inscribed in *batches* for the same man, whose offering would then be of several vases at once and not just one.¹ It may well be then that we are dealing with far fewer 'writers', whose style might differ in details in different batches of inscriptions made at different times, on different shapes, and with different brushes.² We can hardly expect the precision and uniformity shown by the more meticulous Attic artists of the day in their inscriptions, and the dedication 'writers' seem not to be of the best Chian artists—at least, those inscriptions that appear on finely-decorated vases and which are decidedly neater neither are by them, nor seem to be votive.³

The inscribed vases seem then to be the products of a factory making cheap votives. I say cheap intentionally, for the vases are mostly undecorated and their value lies in the novelty of the inscriptions. Some phialai by the 'Z. 2 writer' have simple lion or sphinx decoration, but the majority of the vases are kantharoi with perhaps a painted line on their outer wall and the basic white and red lotus and bud decoration within. It is too easy to assume that a Naucratis fragment must be from a chalice, the shape so distinctive of the fabric. The profile of the upper wall of a kantharos or chalice is the same.⁴ Most chalices have red and white lotus and bud decoration within, but so do many kantharoi, so this is no criterion. That many of the inscribed vases are kantharoi is proved by the springing of the handle preserved at the rim, or by the profile of the lower wall where enough of the vase is preserved.⁵ The excavators' principle of selection has denied us the chance of determining whether any are chalices, as the handles on this shape are low on the body, well away from any inscriptions there might be by the rim, and not being adjacent to any decoration were therefore not kept. Some chalices certainly bore inscribed dedications, but they seem to have been larger and finely decorated vases, and cannot

¹ Mikis (or -miki) gives a batch of kantharoi with undecorated interiors and the paint slightly overlapping the rim on to the outside, and two *with* interior decoration (CW nos. 188, 221 + 222), to Zeus Hellenios (the 'M. writer'). Demophon the Chian gives kantharoi (the certain attributions to the 'D. writer' have no decoration within) to Aphrodite. The 'N. writer's' batch have plain interiors, the 'E. writer's' decorated interiors; both for Aphrodite. Aigyptios gives kantharoi with interior decoration (the 'Aig. writer': ? to Aphrodite). Zoilos' phialai (the 'Z. 2 writer') for Aphrodite are decorated with lions or sphinxes (I am not sure that there is room for a Heracles so near the rim on CW no. 60) and all have the same rim pattern; they are all decorated in a reddish-brown paint, but their inner decoration is not repetitive (it seldom is in phialai): CW no. 144 is not a phiale and does not belong to this batch. Zoilos' kantharoi for Aphrodite have interior decoration; his 'writer' (Z. 1) occasionally uses punctuation, though we cannot be sure it is always for him (CW no. 190 probably does not belong here; it is from a chalice with elaborate interior decoration). I do not know on what type of vase Zoilos incised a dedication (*Naukratis* ii. 67, no. 825; ? Attic).

² Of the 'writers' the only real individualist seems to be

the 'N. writer'.

³ CW nos. 25 (attributed to the 'M. writer', however), 59, 61.

⁴ So far as I know no complete kantharos has been preserved from Naucratis, though the shape appears on one of the chalices in a *komos* scene (*JHS* xlv, pl. 6, 27). It has been found on a number of other sites, often complete: Ialysos, *Clara Rhodos* viii. 43, fig. 26 (right); Delos, *EADelos* x, pl. 20, 119, 120; *Aegina* pl. 120, shape 103 (most of the inscribed fragments seem to be from kantharoi); Chios, *ADelt* ii. 199, fig. 15; *Lindos* i. 280, no. 973a(?); Ithaca, *BSA* xliii. 97, no. 586, fig. 51, and 99 f.; no provenance, Oxford *CVA* ii, pl. 392, 18. The absence of slip beneath the paint on the interior is a mark of lateness. The cups which spread to the base (*Aegina* shape 104, cf. *JHS* xlv. 217, fig. 61) are of a different tradition. *EADelos* xv, pl. 32, Ae 90, 91 may well be Chian also. *Clara Rhodos* iii. 207, fig. 204 (centre top) seems a late example.

⁵ Certainly kantharoi are CW nos. 15, 35, 46, 47, 49, 69 (not a phiale), 75, 102, 103, 150, 151, 156, 173, 185, 187, 188, 224, 229. Phialai are CW nos. 16, 45, 60, 62, 64, 89, 125, 139, 145, 193-5, 198?, 201, 212, 213; *not* nos. 69, 94, 95, 108, 138. CW no. 51 seems from a one-handed round-mouthed jug.

be classed here. The dedications on them never appear by the rim, but between the stripes on the lower bowl of the vase.¹

Inscriptions similar to those on the Naucratic kantharoi have been found in Chios on dedicatory vases, as well as others with more complicated dedicatory formulae, and a potter's signature.² These were surely made in the island, but unfortunately examples there are as yet too few to compare with those at Naucratis.³ Elsewhere they are met only on Aegina, whither I would expect them to have been carried from Naucratis rather than Chios (see below). It would certainly be easier to understand if the factory were at Naucratis, near the places of dedication. Humbler votives of this type, whose only value and attraction lay in their inscriptions, were hardly ever made in one place deliberately for dedication in another,⁴ and no other vases in Naucratis bear deliberately painted dedications in this way.

The names of the dedicators help but little, though they may of course be found one day to recur on vases in Chios in circumstances which might weaken any argument for the existence of a Naucratic factory. Aigyptios, one of the dedicators, need not of course be a 'half- or Hellenized Egyptian', as Cook and Woodhead point out:⁵ he *need* not be, but the name is not an ordinary Greek family name and would be readily adopted by an inhabitant of Naucratis. Uneasiness about the sex of another dedicator, Mikis (or -mikis),⁶ may arise from the conviction that dedicators should be merchants from Chios, hardly women. Certainly some masculine names end in -is, but in Naucratis, the Shanghai of the eastern Mediterranean, a woman might enjoy exceptional status, and the name and dedications of Rhodopis,⁷ who may have been Mikis' townsfellow and contemporary, immediately spring to mind, as well as other dedications by women at Naucratis.

The only dedication of a Naucratic vase by a person certainly not a Chian is attested by the *incised* inscription of a Tean,⁸ but Chians also incise their dedications on these vases,⁹ so we cannot argue from this that the Tean incised because he had no opportunity to bespeak a painted inscription. All other inscribed pottery dedications at Naucratis are incised, and it is

¹ Thus on CW nos. 14, 27, 54, 58, 58a (the number is 88.6-1.495), 198? (possibly a phiale). The only decorated chalice found with an inscribed dedication at Emporio has it in this position also. CW no. 58 is not a lid, but again the lower bowl of a decorated chalice; the inscription is upside down on the vase, which is not usual, but understandable as it would be easier to write that way, i.e. with the vase inverted, and a graffito in a similar position on a chalice (BM 88.6-1.182) is also upside down. Chian and Naucratic lids are only slipped inside, not painted over. Some rim fragments with elaborate decoration are probably from chalices, but none of the inscriptions which appear there are for certain dedicatory rather than descriptive labels for figures now missing or the like; cf. CW nos. 1, 30, 196, 197, 200, Reading 26. ii. 59.

² At Kato Phana (CW nos. 35-43 and BSA xxxv. 161 f., fig. 13) and Emporio (for the potter's signature see *JHS* lxxv Suppl., pl. 2e).

³ If a Naucratic 'writer' is indeed to be identified on a vase in Chios we need be no more surprised than at the inscriptions in Aegina.

⁴ Cf. Boardman, *BSA* xlix. 194.

⁵ Op. cit. 162. Lacking an article it cannot be an ethnic.

⁶ Ibid. 161, n. 19.

⁷ Hdt. ii. 135 (part of the basis of her dedication in Delphi, *BCH* lxxviii. 133, *JHS* lxxiv. 158, Mastrokostas, Γερασ Κεραμοπούλλου 635 ff.). She was brought to Egypt

by a Samian, bought and freed by Sappho's brother Charaxos, a wine-importer. It would be interesting to learn on what grounds she could be identified as an Ethiopian princess (cf. *AJA* lix. 177). For the charmers of Naucratis see Hdt. ii. 135, 5, Ath. xiii. 596b, and note the dedications *Naucratis* i. 61, nos. 33, 117; ii. 63, no. 712, 66, no. 798 Δωρίς φιλτρον(?) Ἀφροδίτη, and *BSA* v. 56, no. 108, that of the hetaira Archedike. Mikis' dedications are the only ones to mention Zeus Hellenios at Naucratis. This need not be taken as evidence of a regular cult of Zeus with this epithet (cf. *RE* s.v. 'Hellenios') and might even be a non-Greek's thank-offering to the God of the Greeks (? for the Greeks). Cf. the Hellenion dedications with formulas like τοῖς θεοῖς τῶν Ἑλλήνων (*JHS* xxv. 116, *BSA* v. 55 f.), which incidentally could as easily explain the Naucratic dedications attributed to the Dioscuri, CW nos. 164, 166, to which we might add the shaky no. 160 and BM 1924.12-1.793. The sanctuary of Zeus founded by the Aeginetans (Hdt. ii. 178) has yet to be identified; Zeus Hellenios was worshipped on Aegina and it may be that the Zeus of Mikis' dedications is the Aeginetan one.

⁸ *Naucratis* ii. 64, no. 758. The Χαλκιδεύς of *BSA* v. 55, no. 48 (now Oxford G. 123.2) was thought not an ethnic by Gardner, though a name could have preceded it.

⁹ *Naucratis* ii. 63 f., nos. 706, 757; and perhaps other inhabitants of Naucratis, *ibid.* no. 754 and cf. no. 737.

only on vases of the Naucratic fabric that inscriptions are for the most part painted, in itself suggestive of the more ready accessibility of their source.

Aegina

The only site outside Chios and Naucratis from which this type of pottery with painted inscriptions has been recovered is Aegina.¹ Of course there was no Chian factory there and the vases must have come, with the dedicator, probably from the place in which he ordered them. Now there seems no obvious reason why a Chian merchant should be regularly conducting trade between Chios and Aegina, which was probably a trade rival, rather than any other state in Greece; but there would be every reason for a merchant resident in or based on Naucratis to make the journey, because Aegina, of all the states of Greece proper, was the only one which seems to have enjoyed some privileges in the Greek trading community there. Herodotus records that the Aeginetans were allowed to found a *temenos* of Zeus, and their presence there can only imply some commercial interest also.² Their connexion with Naucratis probably also explains the presence of early Attic black figure there; and conversely the Attic pottery suggests that Aegina's interest dates back to the earliest years of the town's history.³

The only dedicator in Aegina whose name is known for certain is Aristophanes, also met on vase dedications in Naucratis, though he appears to have a partner in trade, or at least dedication, on his Aegina run or business trip,⁴ and he was not the only visitor there to bring with him these vases to dedicate.⁵ It is, of course, possible that these dedicators came all direct from Chios for reasons of trade which we cannot divine, but the Aegina-Naucratis connexion seems for its simplicity a preferable explanation. The presence in Aegina of faience figurines and scarabs which von Bissing declares to be of Greco-Egyptian, probably Naucratic, origin may also be significant in this context.⁶

The Vases

If some of the Naucratic vases are in fact the products of a Chian factory in Egypt, can they be distinguished from native Chian work? The criterion of fabric is not very likely to help, as we have seen. Otherwise, of all the groups found in Naucratis, two seem to me most likely candidates as local products by reason of their decoration, and one other a possible.

The first is that of the cheap inscribed votive kantharoi and phialai discussed above, on which there appears but rarely any animal or figure drawing. The evidence afforded by their inscriptions and distribution has been dealt with already. The second group is that of vases decorated in what we may call the Grand Style, colourful, imaginative masterpieces of archaic art, preserved in tantalizing fragments only.⁷ It is as yet perhaps too early to attach much significance to the fact that the style is known so far only in the fragments found in Naucratis itself, in Aegina, whose connexions with Naucratis we have already mentioned, and in Athens,⁸ probably

¹ CW nos. 1-15.

² Hdt. ii. 178; Price, *JHS* xliv. 202 f.; von Bissing, op. cit. 80; *Zeit und Herkunft* 97 f. That several Fikellura vases might have reached Aegina (and Attica for that matter) via Naucratis is not surprising (*BSA* xxxiv. 85, 97). The early coins on the Aeginetan standard which were once thought Chian are almost certainly not so. See Seltman, *NumChron* 1926, 150 f. See also p. 58, n. 7.

³ Doubtful evidence of more direct Athenian relations with Naucratis may be read into the mention in *Ath. Pol.* 11 of Solon's visit to Egypt combining business with pleasure: ἀποδημίαν ἐποιήσατο κατ' ἐμπορίαν ζῆμα καὶ θεωρίαν εἰς Αἴγυπτον; cf. Freeman, *Work and Life of Solon* 155-7, 182 f.

⁴ *BSA* xlvii. 161 f.

⁵ The καλή εἰσι on a chalice there more likely refers to the vase than its owner (CW no. 1).

⁶ Op. cit. 46 f.; he cites the distribution of these objects and of Naucratic pottery as an argument in favour of a local Greek factory for the latter at Naucratis. Cf. Pendlebury, *Aegyptiaca* 95 ff.

⁷ Examples in *JHS* xlv, pl. 6, 1-6, 8-17, 19-28.

⁸ Graef-Langlotz, *Akropolis Vasen* i, pl. 15, 24, no. 450. If an Athenian ever dedicated at Naucratis, no record of his nationality is preserved in the extant dedications: Chians dedicated Attic pottery, *BSA* v. 55, no. 60; *CVA* Brussels, iii, pl. 122, 2, and see p. 57, n. 1.

via Aegina. A not inconsiderable amount of sixth-century pottery has by now been excavated in Chios at Kato Phana, Emporio, and Rizari (Chios town), and the Grand Style is still not represented.

Epigraphically and stylistically both of these groups seem to belong to the second quarter and middle of the sixth century.¹ In the decoration of the second group there is little enough to suggest an origin in Egypt. There are a number of unusual mythological scenes on the Grand Style vases which it is not easy to interpret from the evidence of the usual Greek repertoire. But it is clear that Ionian sixth-century vase-painting is far more complex than has long been supposed, and is also capable of considerable inventiveness. It is a tempting though an unprofitable sport to seek Egyptian inspiration for scenes as that of the woman carrying a decapitated head,² the bird climbing steps,³ the man crouching in the crook of a woman's arm;⁴ even to speculate on what the —εἰθοι on one fine fragment might have meant in another language.⁵ For this period the Egyptologist relies so much on Greek sources that no help is likely to be obtained from his lore.

The general appearance of the Grand Style vases does, however, suggest a further point which may be of some importance. The colour conventions found on them resemble no Greek vase-painting so much as they do the Egyptian murals and painting on wood which must have been familiar to Greeks resident in Egypt. The lively polychromy of the Grand Style singles it out as a class apart from the usual run of decoration on Ionic vases,⁶ and it seems not unfair to cite this point as evidence in favour of its production by Ionians outside Ionia in a milieu where the Greek style of 'black and white' painting was alien.

Wherever these fine votives were produced, it is clear that the market for them at Naucratis must have been an important one, and therefore one whose tastes and demands might be expected to influence the style of the supply. Two of the most significant results of external influence or competition on Chian or Naucratic vase-painting of the early sixth century are the adoption of the black-figure technique around 600 B.C., and a little later some markedly Laconizing features. The island of Chios, with its long tradition of distinctive local pottery, was a poor market for foreign wares. The ubiquitous Corinthian is comparatively rare, Attic far more so, and Laconian not found at all as yet. At Naucratis Corinthian, Attic, and Laconian are plentiful, and provided stimulating competition which no factory producing fine pottery for the same market could well ignore. A Chian potter in Naucratis would both need to meet the challenge if he was to survive, and have a better opportunity to study and adapt the new styles than his cousin in Chios with his secure home market. The black-figure technique probably came to Chios direct from the mainland of Greece, but the specifically Laconian features which are borrowed are worth examining. The favourite Laconian pomegranate

¹ *BSA* xlvii. 159, 163; the dates are perhaps a little high. The interior decoration of the vases is a simpler derivative of that current in the first quarter of the century, and on the date of some of the Samian inscriptions compared see Klaffenbach, *DMitt* vi. 17.

² *JHS* xlv. 219, pl. 6, 21; Price, *ibid.*, thinks this may be a Danaid. Or Isis reassembling Osiris?

³ *Op. cit.* 213, fig. 51 (*CVA* Cambridge, ii, pl. 496, 45). Common in Egyptian myth and religion as the path to heaven, the approach to Osiris' throne; even a pyramid! Price explained the steps as of an altar. A recent study derives the stepped Ionian altar from Egypt and finds the earliest example in that before the Temple of Aphrodite at Naucratis, of the early sixth century (Hoffmann, *AJA* lvii. 193 f.). The bird is apparently a partridge.

⁴ *JHS* xlv. 218 f., pl. 6, 6, explained as perhaps Aphrodite protecting Aeneas (but see Beazley, *Attic Vase Paintings in Boston* ii. 20). It might be the Greek way of depicting the Egyptian and oriental 'embrace' of a king by his tutelary deity.

⁵ *CW* no. 59, pl. 34, 5. Other myths represented on Naucratic are more easily explained; Price, *op. cit.* 218 f. The 'monster' of her pl. 9, 10 is a siren. A fragment in Oxford with half of a torn dog may be from a boar-hunt scene (*Oxford G.* 114. 43). For a possible scene from the Midas story see Brommer, *AA* 1941. 40, 52, fig. 8.

⁶ Cook, *BSA* xlvii. 147. Rumpf detects Chian influence in the Bocanera plaques from Caere and the newly found Gordion frescoes (*MuZ* 46, *AJA* lx. 75); but polychrome painting has yet to be found in Chios itself.

motif begins to appear as subsidiary ornament on many Naucratis chalices after about 580, usually as part of their interior decoration. In its more specific function as the border to the tondo of a cup it appears on two Naucratis cups which are direct imitations of their Laconian models.¹ The Laconian artist who affected this style is now called the Arkesilas Painter,² and more of his work has so far been found in Naucratis than on any other single site.

Another fancy of the Arkesilas Painter is for red-spotted boars, one of which has appeared at Naucratis.³ This brings me to the third group of Naucratis vases whose manufacture in Egypt seems to me probable. They are the finest Animal Style chalices, and are the immediate predecessors of the Grand Style vases,⁴ probably of the turn of the first and second quarters of the sixth century. There is generous use of added colour on them, and of the animals the red-spotted boar is one of the most striking. He differs from his Laconian counterpart only in the use of reserved lines for incision, and usually in the Ionian parting of the bristles on the back.⁵ The distribution of vases in this style is interesting, and may be significant. A fine example was found on Delos,⁶ which may be considered neutral ground, and a fragment with the familiar red-spotted boar in Cyrene,⁷ which was, next to Naucratis, the most important Greek settlement in North Africa, and probably an immediate source for many of the Laconian vases which reached Naucratis.⁸ No vases or fragments decorated in this style have yet been found in Chios. The painted dedications which we have already noted on the lower bowl of chalices from Naucratis will be from these and the Grand Style vases.

Of the other main groups of Naucratis vases it is difficult to guess which might be locally made, and which imported. All the incised styles, except the most Laconizing, are met in both Chios and Naucratis (even the work of the same painter), also the plainer styles with figure or animal decoration. Imitations of other fabrics found in Naucratis may provide ground for speculation, notably those of East Greek cups⁹ and of Clazomenian.¹⁰

Chios and Naucratis

It seems quite likely that Herodotus' account of Naucratis unduly minimizes the part Chios played in its foundation and early history. Roebuck has argued the case well and suggested that Chians may have founded the Aphrodite sanctuary, not mentioned by Herodotus, in which so

¹ Lane, *BSA* xxxiv. 186, discusses and illustrates the Berlin fragment. To the Oxford piece (G. 133. 2, *CVA* ii, pl. 396, 33) has now been added another fragment (G. 133. 6) giving part of the handle palmette, which is pure Laconian in type. The *CVA* description of the outside decoration is not accurate, as there are only one band of tongues and one of rays between the red and black stripes: the shape cannot be a phiale as stated there. *CVA* Cambridge, ii, pl. 496, 67 is from another cup by the same hand, and *JHS* xlv, pl. 12, 16 may be another (BM 86.4-1.128). In the style of the Oxford cup are the chalice fragments, *ibid.* pl. 12, 17-19: poloi are uncommon in Naucratis but cf. the Arkesilas Painter's cup, *BSA* xlix, pl. 50.

² Shefton, *BSA* xlix. 300 f.

³ The fragment in Munich, *ibid.* 300, no. 8 (not a fawn). I am indebted to Dr. R. Lullies for a photograph. *Ibid.* pl. 50 shows a fine specimen.

⁴ Most have filling ornament, which is almost unknown in the Grand Style, and elaborate rim decoration which develops directly from the Wild Goat chalices of around 600.

⁵ Cf. *JHS* xlv, pl. 10, 9; *Naukratis* i, pl. 5, 44; *CVA*

Oxford, ii, pl. 396, 20 (on its side); Fairbanks, *Boston Vases* pl. 34, 321. 5, and other fragments in London.

⁶ *EADélos* x, pls. 19, 51, 52, no. 121; note the pomegranate motif in the interior decoration.

⁷ *Africa Italiana* iv, pl. 3, 12 (upside-down).

⁸ A possible Cyrenaic Greek graffito on a Laconian vase, *Naukratis* ii. 64, no. 767 (Roebuck, *Classical Philology* xlv. 247 n. 72); no. 766 is better read Νε(ι)λόμανδρος, as Miss Jeffery has pointed out to me.

⁹ *JHS* xlv. 215, fig. 59; the models are found at Chios as at Naucratis.

¹⁰ The column-crater fragment, *Naukratis* ii, pl. 13, 1 (cf. Price, *op. cit.* 204 and Cook, *BSA* xlvii. 127 n. 20, 139 n. 64), seems certainly Naucratis but the treatment of the subject, use of incision and white dots, is unfamiliar and best explained as imitative of Clazomenian. The plastic head in Oxford (*CVA* ii, pl. 401, 22; Cook, *JHS* lvii. 236 and *BSA* xlvii. 126) is Clazomenian by decoration and profile, seems Naucratis by fabric and slip, but still is better omitted from the list of Chian, *BSA* xlvii. 159, n. 5. Little Clazomenian has been found in Chios, *BSA* xxxv. 162 (cf. xlvii. 148) and *BSA* xlix, pl. 6, 69.

many Naucratis dedications were found.¹ Certainly pottery of the Chian type was a commonplace on the site since its beginnings as a Greek settlement and down to the middle of the sixth century, and some of it may have been made by Chians there. Around the middle of the century there is a sharp falling off, and only a very little of the later Chian styles, which are just beginning to be recognized in Chios itself, appears in Naucratis.² Certainly any Chian factory which may have been there was then closed, for reasons at which we may merely again guess. Accident or bankruptcy could as well account for it as, for instance, any Samos-Egypt agreement hostile to the now Persian Chios. The competition of the Attic imports may also have proved too strong, as well as that of new and vigorous East Greek schools, some of which seem also to have had factories in Egypt. One of these operated at, or near, Tell Defenneh (Daphnae) and produced decorated situlae, a ware whose conspicuous absence at Naucratis may be cited as evidence for its local production rather than import from overseas.³ The comparable dearth of Naucratis at Tell Defenneh might by the same token indicate its local manufacture for the local market.⁴

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¹ *Classical Philology* xlv. 241 f., and cf. xlv. 217. Von Bissing (op. cit. 38 f., 64 f.) has other views on the introduction of the Aphrodite cult.

² There are in Oxford scraps of black-figure kantharoi and other vases of the type found at Emporio (*JHS* lxxiv. 162, fig. 12b) of the mid-sixth century or later. The fragment *CVA* Oxford, ii, pl. 396, 3 is probably as late.

³ Cook, *CVA* British Museum viii. 32, and cf. above, p. 56, n. 3.

⁴ Cook, op. cit. 59: add the wine jar from Chios (c. 600) which had been reused in Egypt and sealed with cartouches of Amasis (*Tanis* ii, pl. 36, 5; Petrie, *Ten Years Digging in Egypt* 60 f.). Argument from the frequency of fabrics at Tell Defenneh is not, however, very safe, as Cook points out, *JHS* lvii. 229 f.

A CHIAN WINE-MEASURE

(PLATE 5)

AMONG the Chian inscriptions collected by G. Zolotas and published by his daughter Mme Sarou in *Ἀθηνᾶ* xx (1908) 113–281 there are a few for which Zolotas relied on readings supplied by correspondents who were less careful epigraphists than himself. One of these¹ has now appeared in Chios Museum and deserves republication.

Chios Museum (from Aplotaria in Chios town). No inv. no. Block of blue-grey Chian marble, broken off on right and bottom left. Inscribed on front face. On the top (left) a circular cavity, with raised rim, tapering downwards to a small drainage hole, and (right) a similar but larger cavity of which only a small section is preserved. The inner surface of both is carefully dressed.

Dimensions: Block, H. 0.27 m., W. 0.64 m., Th. 0.53 m.

Small cavity, H. 0.27 m. (excluding drainage hole, including raised rim), D. at top 0.197 m.

Large cavity (reconstructed), H. 0.27 m., D. at top 0.284 m.²

Letters, first row, 0.068 m. (*omicron* smaller, 0.045 m.), second row, 0.022 m. (*omicron* smaller, 0.017). Interl. 0.012 m.

Οἶν[ηρά]
Διημέκτον [-----.]

Z. reads (with lines reversed) 1. ΔΗΜΙΕ 2. ΟΙ. Line 1, Οἶν[ηρά], cf. *BCH* lxxix (1955) 366 and figs. 37–38. Line 2. Alternatively ΔΙ 'ΗΜΙΕΚΤΟΝ (cf. p. 63, n. 2). Perhaps we should restore ἡμισυφόριον or the like (see below).

The absence of any tell-tale letters, the scratched surface of the stone, and the careless nature of the writing make it impossible to date the inscription with any accuracy. Such indications as there are (the size of the *omicron* and its position in the centre of the line, the M with vertical strokes, the E with central bar two-thirds the length of the others, the appearance of what may be small apices) together suggest the third/second century B.C., but this with every reserve.

Zolotas comments ἵσως εἶνε ὄρος, but clearly this is not a *horos* but a *sekoma*, a wine-measure very like the later examples recently published from Thasos.³ For the smaller cavity measurement by water, with an allowance for damage to the rim, gives a capacity of about 4,800 c.c., calculation 4,600 c.c.⁴ The dimensions of the larger measure have to be reconstructed from the small section which survives. Calculation based on these restorations gives 14,300 c.c., which is near enough three times the size of the other to suggest that the figure is fairly accurate.

We have two problems, one in metrology, the other in mathematics: to determine what the Greeks believed these measures held and to find out how they arrived at them.

The first is raised by the oddity of the word διημέκτον, which should mean, on the analogy of τριημι-compounds, twice half a *hekteus*, i.e. one *hekteus*. But the use of such a periphrasis is hard to justify. It is only conceivable if ἡμέκτον had become so firmly established as a basic, as opposed to a fractional, measure that its original significance had been forgotten (as we might say four quarts instead of one gallon and do say two half-crowns instead of one crown). Awkward though this is we should, I think, accept it, for the alternative ΔΙ 'ΗΜΙΕΚΤΟΝ (suggested to me by M. Pouilloux) is epigraphically a little suspicious and metrologically rather difficult.⁵ The smaller measure, then, we assume to be a *hekteus* and the larger will therefore be half an amphora. This

¹ No. POB', p. 271.

² For further dimensions see FIG. 1.

³ J. Pouilloux, *Recherches sur l'histoire et les cultes de Thasos* 405 f., with references to earlier literature, and *BCH* lxxix (1955) 366 with figs. 37–38.

⁴ Regarding the cavity as made up of frusta of cones with an allowance for curvature calculated by Simpson's rule (H. Lamb, *Infinitesimal Calculus* 247 ff.).

⁵ Below, p. 63, n. 2. M. Pouilloux has most generously put at my disposal his observations on these *sekomata*.

is confirmed by the comparable Thasian *sekoma* where the larger cavity (approx. 15,360 c.c.) is described on the stone as $\eta\mu\iota\alpha\mu\phi\omicron\rho\iota\nu$ (which should read $\eta\mu\iota\alpha\mu\phi\omicron\rho\iota(\omicron)\nu?$). We should then have a Chian amphora of about 28,800 c.c. ($4,800 \times 6$) which, though smaller, is of the same order as the normal Athenian (38,800 c.c.), is a little larger than the later Roman (26,600 c.c.), and is only slightly different from the Thasian.¹ On the assumption of a normal twelve-*chous* amphora this would give a *chous* of 2,400 c.c., but alternatively we might have a ten-, nine-, or eight-*chous* amphora (all of which are found) with a *chous* of 2,880, 3,200, or 3,600 c.c.

Attempts to expound the intricacies of Greek metrology with no more help than the confusing theoretical information of later metrological writers lead to such conflicting results that it would be wise to wait for further evidence from the archaeologists before trying to develop any systematic theory. This is particularly true of Chios, where we have no direct evidence whatsoever apart from this stone and the coin standard. The latter appears to have remained unchanged until at least the first century B.C.,² based on a drachma of 3.90 grm. and thus standing to the Attic standard in the ratio of 39:43 or roughly 7:8. It is interesting to notice that one of our possible *choes* (that of 2,880 c.c.) increased in this ratio produces almost the exact equivalent of the standard Attic *chous* of c. 3,200 c.c.,³ and this may be taken as a slight argument in favour of a ten-*chous* amphora. It would then be based on a *kotule* of 240 c.c. or 9 oz., equal to the so-called Alexandrian *kotule*, mentioned in the first-century A.D. *Tabula de Mensuris*.⁴ But the twelve-*chous* amphora is certainly more common and therefore *a priori* more likely. It would be based on a *kotule* of 200 c.c. ($7\frac{1}{2}$ oz.). Finally the nine-*chous* amphora would give us a *chous* on the Attic standard (3,200 c.c.). Thus of the four possibilities only one has no theoretical argument to support it. Fortunately other evidence may help to narrow the field.

There are frequent references in papyri to $\chi\iota\alpha\ \kappa\epsilon\rho\acute{\alpha}\mu\iota\alpha$ and $\eta\mu\iota\chi\iota\alpha$ and it is clear that these terms distinguish the capacity as well as the origin of the containers,⁵ and this suggests a divergence from other standards (including the Attic) at least at the amphora level and possibly below. Thus we may perhaps reject the nine-*chous* amphora, which implies an Attic *chous*. Unfortunately these texts give no indication of the actual quantities involved, so we must still choose between a ten- and twelve-*chous* amphora. Here a series of Chian amphorae from Athens, each with a mark of its capacity, is of some help.⁶ They contain, with some variations, about $7\frac{1}{4}$ Attic *choes*, i.e. 24,000 c.c., and this is exactly five times the contents of our *diemiekton*. Miss Lang believes⁷ that these jars were constructed from standard minimum dimensions and that they are therefore likely to exceed rather than fall short of Chian standard measures. Arguing from the 7:8 coin-standard ratio she then suggests that they were designed to contain eight Chian (the equivalent of seven Attic) *choes* and that Chian caution or Chian honesty led to slight excess in the actual measurements. This is entirely possible and would give us the following scheme of Chian standards.

	c.c.
* <i>Kotule</i>	240
* <i>Chous</i>	2,880
<i>Hekteus</i> (or <i>diemiekton</i>)	4,800 ($1\frac{3}{4}$ <i>choes</i>)
3 <i>hekteis</i> (or half an amphora)	14,400 (5 ")
Amphora (Athens)	23,040 (8 ") (= 7 Attic <i>choes</i>)
*Amphora (Chios-standard?)	28,800 (10 ")

(An asterisk denotes that the measure is hypothetical.)

¹ The careful finish of the inner surface makes it unlikely that metal liners were used, so we need not hesitate to treat the actual measurements as absolute.

² Head, *Hist. Num.*² 599–601.

³ O. Broneer, *Hesperia* vii. 222 ff. and S. Young, *ibid.*

viii. 274 ff.

⁴ Hultsch, *Metrol. Script.* i. 208. 16.

⁵ Wilcken, *Arch. für Pap. Forsch.* vi. 400 ff.

⁶ M. Lang, *Hesperia* xxv. 1–24, nos. 2, 8, 10, 15, 17, 30, 34, 58.

⁷ Loc. cit., especially p. 4.

In favour of this solution is the parallel of the coins, against it the slightly awkward fractions and multiples of the basic *chous* on which some of the measures are based. If we were prepared to assume that the Chians did not always exceed their standards in their export amphorae (i.e. that $7\frac{1}{4}$ *choes* was an average, not excessive, quantity) we could construct an alternative system, based on a twelve-*chous* amphora. But since this article went into proof Mr. A. P. Stephanou, Superintendent of Antiquities for Chios, has published in a local newspaper another similar *sekoma* (Δημοκράτης, 25 May and 1 June 1957). The stone is still built into a wall and the cavities cannot be measured, but the inscription, which reads Οἰνη[ρά | Ε]ἰκοσακότυλον Στάμνο[ς] (Stephanou's restorations are slightly different), strongly supports Miss Lang's suggestion. Although I am not wholly convinced by her detailed interpretation of two of the *Agora* jars,¹ the mere existence of a measure containing 20 *kotulai*, i.e. $1\frac{2}{3}$ *choes*, makes it virtually certain that she is right. The εἰκοσακότυλον would then be the same as our *diemiektion*. The height of the new stone appears to be the same as ours (see below).

The second problem concerns the construction of the measure. One would suppose a simple process of trial and error (though error would be expensive in time and material), the cavity being tested from time to time against the required volume of water. But a Thasian inscription of the late fifth century B.C. appears to lay down statutory dimensions for standard measures, based (according to the most plausible hypothesis yet suggested) on a mathematical formula for capacity,² and the actual dimensions of the Chian *sekoma* imply the application there of some similar formula. Particularly significant is the depth of 27 cm., which is only slightly more than 14 Ionic fingers,³ a figure so neatly adapted for use in any formula employing $\frac{11}{14}$ for $\frac{1}{4}\pi$ that it is difficult to believe that it is accidental.⁴ As far as I know, there is no actual formula in the metrological writers which can be applied to the differing profiles of our two containers (see FIG. 1), but the combination of two familiar formulae gives a possible answer. If we treat the upper half of each cavity as a cylinder and the bottom as half a spheroid we get two heights of 7 fingers, which are equally suited to formulaic calculation.⁵

$$\text{For the cylinder, volume} = \frac{11}{14} \times 7 \times \text{diameter}^2 = \frac{11d^2}{2} \quad (\text{A}).$$

¹ On Miss Lang's interpretation nos. 10 and 34 of the *Agora* series, complete jars holding 7 Attic *choes*, would be decisive for her theory. For in their inscriptions she finds confirmation that they were designed to hold 8 Chian *choes*. But neither, I think, is certain. No. 10 has an unintelligible mark followed by eight vertical strokes and a small *eta* and unless we can interpret the initial mark it would be rash to assume that the strokes indicate capacity in Chian *choes*. No. 34 has an E followed by two vertical strokes which Miss Lang understands as half a *metretes* (E = hemi) and 2 *choes*, i.e. 8 *choes*. She then sees in the appearance of Chian psilosis evidence for the use of a Chian standard. But would we find with Chian psilosis an Attic use of *epsilon* for *eta*? Chian inscriptions of the fifth century are consistent in their use of *eta*.

² M. Lang, *BCH* lxxvi (1952) 18 ff. The inscription reads τῶν ἀγγέων μέτρα δ[...]. | ΠΓ : ΠΔ | ΔΔΔΔ||| : ΔΔ|| and these figures are ingeniously interpreted by Miss Lang as max. and min. heights and diameters used according to a formula later described by Heron of Alexandria (Hultsch, *Metrol. Script.* 202 ff.) for the volume of a pithos. Cf. Pouilloux, *Thasos* i. 213 ff.

M. Pouilloux, impressed by the coincidence of multiples

of 11 in this inscription and the letters ΔI on the Chian stone and at the same time disturbed by the oddity of ΔI ημῖεκτον, would prefer to read ΔI ημῖεκτον. With some hesitation I reject this attractive suggestion because the significance of these multiples remains unexplained (though it should be noted that the diameter of the Δημῖεκτον is very nearly 11 Ionic fingers); because I should expect some division between ΔI and ημῖεκτον; because with 4,800 c.c. as half a *hekteus* the Chian amphora would become abnormally large.

³ It can be seen from FIG. 1 that if we exclude the immediate opening to the drainage hole the height becomes exactly 14 fingers.

⁴ Heron's formula used by Miss Lang for example:

$$\frac{11}{14} \times \text{av. diameter}^2 \times \text{height}.$$

⁵ Archimedes Περὶ κωνοειδῶν καὶ σφαιροειδῶν, Prop. xxvii: παντὸς σχήματος σφαιροειδὸς ἐπιπέδῳ τμηθέντος διὰ τοῦ κέντρου ὁρθῶς ποτὶ τὸν ἀξονα τὸ ἀμίσειον τοῦ σφαιροειδὸς διπλάσιόν ἐστι τοῦ κώνου τοῦ βάσιν ἔχοντος τὰν αὐτὰν τῷ τμήματι καὶ ἀξονα τὸν αὐτόν. It was, of course, known that the volume of a cylinder was three times that of the corresponding cone.

The volume of a spheroid, height 14 fingers, = $\frac{2}{3}$ volume of the corresponding cylinder:

$$\frac{2}{3} \times \frac{11}{14} \times 14 \times \text{diameter}^2 = \frac{22d^2}{3}.$$

Therefore the volume of half this spheroid (height 7 fingers) = $\frac{11d^2}{3}$ (B).

Adding (A) and (B) and solving the equation we find that the diameter of the cylinder required for any given volume = $2\sqrt{\frac{\text{vol.} \times 6}{55}}$ or if we take $\frac{1}{9}$ as an approximation for $\frac{6}{55}$, $2\sqrt{\frac{\text{vol.}}{9}}$, or perhaps even more simply the square root of the desired volume divided by three. In our case the

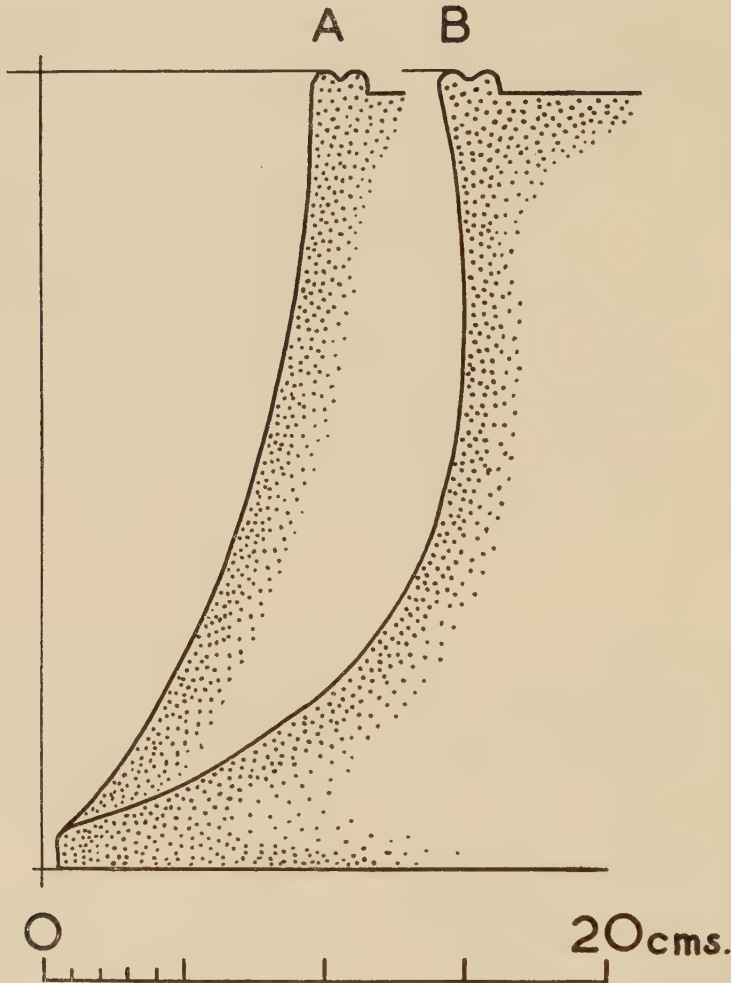


FIG. 1. SECTIONS OF SMALLER CAVITY (A) AND LARGER (B)

sekoma constructor would require capacities of 4,800 and 14,400 c.c., about 770 and 2,300 cubic fingers. Applying the formula we get diameters of 9.2 and 16 fingers. In neither case is the upper half of the measure an exact cylinder, but in both the average diameter is almost exactly what the formula requires (in the first it decreases steadily from 10.6 to 8.2, in the second

it increases from 15.5 to 16.2 and decreases again to 15.5). Thus by a simple calculation the mason could provide himself or be provided with a guide which would save a considerable amount of effort. This suggestion could, of course, be confirmed only by the discovery of further *sekomata* of the same standard depth, and even then other formulae could probably be worked out. In the present state of the evidence these speculations on both standards and methods have perhaps gone far enough.¹

W. G. FORREST

¹ In this note I have done little more than reproduce (and perhaps misrepresent) the expert advice of many friends and colleagues, especially M. Pouilloux, Mr. P. M. Fraser,

Dr. J. H. C. Thompson, and above all Miss Lang. I am deeply grateful to all of them, and to Mr. J. Boardman who drew the figure.

A LATE MINOAN TOMB AT KNOSSOS

(PLATES 6-8)

DURING the course of agricultural operations on the vineyard of one Kosti Psilakis, south of the Temple Tomb and on the opposite side of the Herakleion-Arkhanes road, three vases in stone and two in pottery were uncovered by the cultivator and were appropriated by the Herakleion Museum.

On 24 April 1940 Miss Vronwy Fisher (now Mrs. Hankey) and I excavated the site on behalf of the British School at Athens and uncovered a very small chamber tomb, of which most of the chamber walls and all of the dromos walls had been cut away. One or possibly two L.M. III burials had suffered severely, but the earliest burial on the inmost or western side of the chamber seems to have remained undisturbed until 1940, when Psilakis began to lay out a vineyard here.

Of the three stone vases found by the owner of the land before our excavations, the most imposing was a handsome jug (18) in the material which the Greeks termed alabaster, but which modern authorities usually term calcite. The material looks Egyptian, but M. l'Abbé Drioton has assured me that the shape is not an Egyptian one. The stone is also not a Minoan one, and I am inclined to think the vase was made in Cyprus or Syria, especially as a contemporary deposit in the Royal Tomb at Isopata contained a jug of undoubtedly Cypriote form in the same kind of 'alabaster'. The small ovoid jar 17 in a black and white breccia, a Cretan material, is roughly modelled in the form of the body of a man wearing a wide-sleeved coat. The lid, presumably modelled in the form of a head, is missing. Anthropoid vases are more characteristic of Middle than of Late Minoan deposits, but the absence of the head makes it hard to date this vase securely on typological grounds.

The third stone vase recovered by the owner is a small nest-shaped bowl (19)¹ in grey steatite with horizontal ribbing between the shoulder and the lip, and might be dated on style anywhere between the M.M. I and L.M. I periods. The two pottery vessels found by Psilakis were beaked jugs (4, 5) adorned in the L.M. II style, and a third similar vase (3) was found during the excavation.

During our excavation we uncovered the inhumation burial (I) of an adult man to whom these vases had belonged. The skull was broken and displaced; but the skeleton as a whole, though in bad condition, was *in situ* with the feet pointing north-east and the body laid out on its back. Underneath the skeleton was a bronze sword (16), presumably slung from the shoulder by a baldric. The flanged hilt with its horned guard is of a type well known in Crete from L.M. IB to L.M. IIIA times, and equally familiar on the mainland. The hilt plates had perished, but the six flat-headed rivets, which had decorated the hilt, were still preserved. The blade was complete, but snapped across in three places.

Touching the sword on the west were the remains of a metal cup (14), of which much of the bowl was missing; but the rim and base of silver plated on a bronze core were well preserved, and so was the strap handle with a cable pattern in gold. Adjacent to the cup was a silver pin (15) of the type described by Evans as a hairpin, and by Blinkenberg as *une simple épingle repliée*, and regarded by him as the immediate predecessor of the violin-bow fibula.²

The other finds associated with this burial (I) were a blossom vase in purple gypsum (21), complete with lid (22), found near the skull, a low stemmed kylix (1), a knob lid for a pyxis (13), probably employed as a cover for the steatite bowl 19, and two squat alabastra (10, 11).

¹ JHS lxiv (1944) 84, fig. 1 right.

² Blinkenberg, *Fibules grecques et orientales* 40, fig. 5.



FIG. 1. SCALE 1:4

All the finds from this burial (I) belong to the transition between the L.M. II and L.M. III periods. Furumark, I think, would call them L.M. IIIA 1, and I would agree that they correspond to his L.M. IIIA 1 material; but I prefer to call them L.M. IIB and to equate the destruction of the Palace of Minos with the end of that period.

In recent years the excavations of Hood and de Jong at Ayios Ioannis and on the site of the New Hospital at Knossos, together with those of Alexiou at the Harbour Town, have uncovered tombs approximately contemporary with ours and no less richly endowed—all of them presumably to be dated before the destruction of the Palace of Minos.

We can now fill in the picture of the L.M. II style, which when Evans and Pendlebury wrote their books was mainly represented by the great Palace amphorae with only the later vases from the Temple Tomb to tell us what were the smaller vases of the L.M. II period. The horned sword might date anywhere between 1550 and 1350; but the metal cup is a L.M. II type related to the fine bronze basin from the North-West treasury at Knossos.¹

The silver pin belongs to a group cited by Blinkenberg,² who quotes one from Koumasa, two from Palaikastro, two from Gournia (all in bronze), and one from Isopata (in gold). To these we may add one from the Fourth Shaft-grave at Mycenae. It appears therefore to be more a Cretan than a Mainland type, and the Koumasa example can hardly be later than the M.M. period.

Of the two alabstra one (10) has the cruciform design on the base typical of the L.H. II period on the mainland, and the other (11) the concentric circles typical of the L.H. III period.

Just inside the entrance from the dromos on the south side remains of a second burial (II) were found, consisting of two small vases (7, 12) and a few fragments of human bones. These vases were too weathered to allow of their decoration being restored, and it is clear that this part of the tomb must have been exposed to the air, while the earlier burial was protected (presumably by earth fallen from the roof).

Near the entrance from the dromos, but some centimetres distant from the above vases, we found a quantity of fragments of bronze which at the time we could not interpret, but which may have been staples for the attachment of leather armour like those found by Hood and de Jong in Tomb III on the New Hospital site,³ and more recently in a second Warrior Grave at Ayios Ioannis (see below, pp. 85 f.); these may therefore have belonged to the earlier burial.

Inventory of Vases and Objects from the Tomb

1. Kylix with two ribbon handles and offset rim (Mus. No. 9508; FIG. 1, PLATE 6a, b). H. 0.128 m. D. 0.13 m. D. of base 0.065 m. Found scattered in the tomb. Part of base and rim missing. Ephyræan shape. Light clay and slip. Bright red paint. Trefoil pattern with dotted leaves and additional spike or bud. Dotted rosette filling ornament. Bands at base, dots round rim, which is painted inside; two bands inside bowl, handle barred, leaf design below handle; inside of base painted.

2. Cup with ribbon handle, offset rim and flat base (PLATE 6a). H. 0.059 m. D. of rim 0.105 m. D. of base 0.035 m. Near skeleton I. Orange clay, light buff slip, bright red paint, almost entirely defaced. Band at foot, large blobs on rim, broad bands inside, pattern on cup itself entirely defaced.

3. Jug with beaked spout (Mus. No. 9507; FIG. 1, PLATE 6a, e). H. 0.213 m. D. 0.15 m. D. of base 0.048 m. Near skeleton I. Neck and handle broken. Buff clay and slip,

brown paint, worn off. Bands at base and below shoulder; four conventional palm trees in shoulder zone; handle barred; neck painted; sharp plastic band at base of neck and 'rivet' at join of rim and handle.

The two similar jugs 4 and 5 were brought to the museum before the excavations by the owner of the land on which the tomb was found.

4. Jug with beaked spout (Mus. No. 9505; FIG. 1, PLATE 6d). H. to top of handle 0.22 m. D. 0.16 m. D. of base 0.055 m. Rim and spout missing, handle broken. Buff clay and slip, reddish-brown paint. Bands at base; running spiral composed of dots round body; foliate band above two pairs of wavy lines on shoulder; solid spots round neck; handle barred. Plastic band at base of neck and 'rivet' at join of rim and handle.

5. Jug with beaked spout (Mus. No. 9506; FIG. 1, PLATE 6c). H. to top of handle 0.21 m. D. 0.16 m. D. of base 0.06 m. Rim and spout missing, handle broken. Greenish-buff

¹ PM ii. 637 f., fig. 402.

² Loc. cit.

³ BSA xlvii (1952) 251, no. 16.

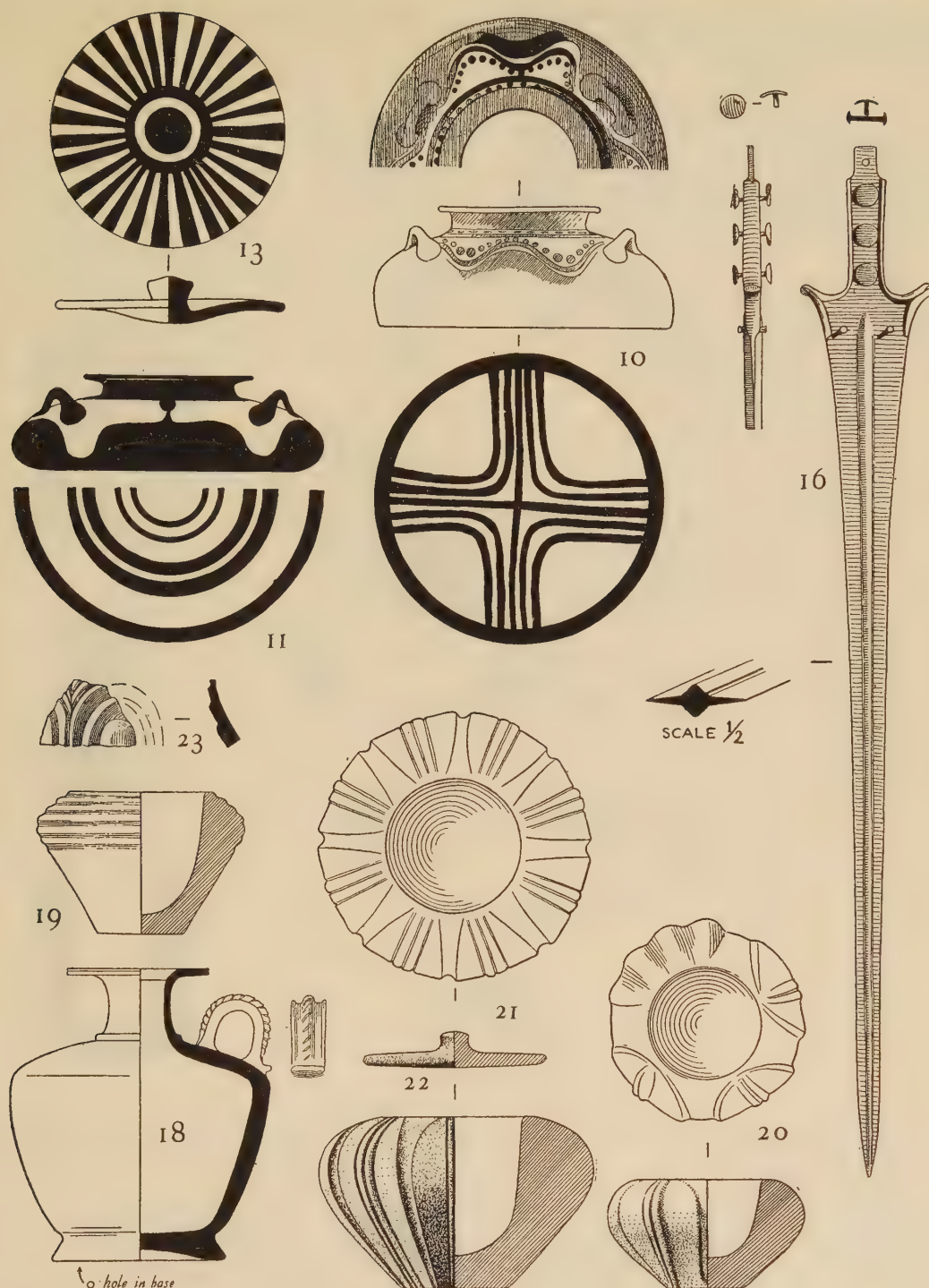


FIG. 2. SCALE 1:4

clay and slip, dark reddish-brown to black paint, much worn. Bands at base; row of ornamental circles between dots round body; foliate band on shoulder; solid spots

7. Strainer pot (Mus. No. 9511; FIG. 1, PLATE 6e). H. 0.115 m. D. 0.086. D. of base 0.065 m. D. of neck 0.06 m. Near skeleton II. Fragmentary, one handle missing. Light



FIG. 3. SCALE 1:2

round neck; handle barred like 4. Plastic band at base of neck and 'rivet' at join of rim and handle.

6. Three-handled amphora (Mus. No. 9503; FIG. 1, PLATE 6f). H. 0.336 m. D. 0.28 m. D. of rim 0.134 m. D. of base 0.125 m. Broken, and large parts missing. Three 'metallic' ribbed strap handles on shoulder. Buff clay and slip. Reddish to brown paint, worn. Bands and ripple pattern round base; 'tricurved arch' pattern on body; row of what appear to be solid spots on shoulder. Bands round neck; rim barred.

clay and slip. Black paint, worn off. There appears to have been a floral design on the bowl. The base was painted. With Burial II (p. 70).

8. Squat jar with narrow neck (PLATE 6a). H. 0.07 m. D. 0.078 m. Near skeleton I. Neck and part of body missing. Light clay and slip; no decoration.

9. Tall alabastron (Mus. No. 9504; FIG. 1, PLATE 7a). H. 0.31 m. D. 0.23 m. D. of rim 0.15 m. D. of base 0.17 m. Broken and parts missing. Buff clay and slip, red shading to brown paint. Basket work design on body; zigzag line

with 'iris' fill and running quirks above round neck; rim painted outside and on top.

10. Alabastron (Mus. No. 9510; FIG. 2, PLATE 7*c*, *d*). H. 0.07 m. D. 0.177 m. Near skeleton I, next to the silver cup **14**; the blade of the sword rested on it. Fragmentary. Buff clay, black paint, defaced. Wave pattern with wavy band, and row of blobs above; another row of blobs between the two bands at base of neck. Cross with five lines to each arm on base.

11. Alabastron (Mus. No. 9509; FIG. 2, PLATE 7*c*, *d*). H. 0.06 m. D. 0.176 m. Near skeleton I. Poor condition, one handle and part of rim missing. Pink clay, dark buff slip, bright red shiny paint, mostly worn off. Wave pattern with high crest. Four concentric circles in pairs on base.

12. Bowl. H. 0.045 m. D. 0.094 m. Near skeleton II. Fragmentary, base missing. Conical shape. Orange clay, unpainted. With Burial II (p. 70).

13. Lid (Mus. No. 9512; FIG. 2, PLATES 6*a*, 7*b*). D. 0.13 m. Next to cup **2** near skeleton I. Broken. Deep buff clay, bright red paint. Decorated with rays radiating from a circle at the base of the handle, which was painted. Probably employed as lid for stone bowl **19**.

14. Cup, silver and gold (FIG. 3, fragments as found; PLATE 8*a*, *b*, as restored). D. of rim 0.098 m. D. of base 0.044 m. W. of handle 0.013 m. Near skeleton I. Fragmentary, all of bowl missing. One strap handle with raised gold rib in form of a cable, band of gold at the base of the handle; raised kylix base with milled gold rim; the bowl had a slight shoulder. The rim and base are silver plate on a bronze core. (See p. 68.)

15. Silver curved pin (FIG. 3). L. 0.13 m. Broken in three pieces. Semicircular in section, tapering to a point on the longer side. (See p. 68.)

16. Bronze sword (FIG. 2, PLATE 8*e*, *f*). L. 0.615 m. W. of hilt 0.022 m. W. of form 0.08 m. Underneath bones of skeleton I. Broken in three places. Horned type with flanged hilt and mid-rib down blade. Six flat-headed rivets found with the sword had evidently adorned the

hilt plates, since there were no rivet-holes in the hilt; two small rivets are preserved in place between the horns at the base of the blade; the tang at the top of the hilt has a small rivet-hole for affixing the pommel. (See p. 68.)

17. Anthropomorphic vase (Mus. No. 2408; FIG. 3, PLATE 8*c*, *d*). Black and white mottled breccia. H. 0.056 m. D. of base 0.045 m. D. of neck hole 0.023 m. Found by the owner of the vineyard. Lid or head missing, slightly chipped. The base is circular, but the body is carved to form the flattened back and curved front of a man in a wide-sleeved gown; sleeves and shoulders are in relief. (See p. 68.)

18. Jug with narrow neck (Mus. No. 2403; FIG. 2, PLATE 7*e*). White alabaster. H. 0.175 m. D. 0.155 m. D. of base 0.10 m. W. of rim 0.018 m. Found by the owner of the vineyard. Part of rim and most of handle missing. Base slightly splayed, fairly sharp shoulder angle, strap handle on the shoulder; wide horizontal rim, raised ridge round base of neck; hole in base. (See p. 68.)

19. Bowl, nest-shaped (Mus. No. 2405; FIG. 2, PLATE 7*f*). Grey steatite. H. 0.08 m. D. 0.12 m. D. of rim 0.075 m. D. of base 0.05 m. Associated with first burial (*JHS* lxiv (1944) 84, fig. 1). Between the shoulder and the lip are five horizontal ribs. (See p. 68.)

20. Bowl, blossom bowl shape (Mus. No. 2406; FIG. 2, PLATE 7*f*). Purple gypsum. H. 0.065 m. D. 0.12 m. D. of base 0.045 m. D. of mouth 0.065 m. Near skeleton I. The bowl has five petals, each with two raised central ribs.

21. Bowl, blossom bowl shape (Mus. No. 2402; FIG. 2, PLATE 7*g*). Purple gypsum. H. 0.10 m. D. 0.16 m. D. of base 0.065 m. D. of mouth 0.08 m. Near skeleton I. The bowl has eight petals, each with three central lines.

22. Lid (Mus. No. 2407; FIG. 2, PLATE 7*g*). Purple gypsum. D. 0.106 m. D. of handle 0.016 m. H. of handle 0.01 m. Below skull of skeleton I. Poor condition. This lid belongs to the stone bowl **21**.

23. Fragment of bowl (Mus. No. 2413; FIG. 2). White alabaster. H. 0.04 m. W. 0.056 m.

R. W. HUTCHINSON

A THOLOS TOMB ON THE KEPHALA

(PLATES 9-12)

THE ridge known as the Kephala is the middle part of the long ridge that extends from Zafer Papoura on the south to Isopata on the north. The numerous Late Minoan and Protogeometric tombs uncovered on the west slopes of this ridge suggest that there was here in all probability a Minoan Appian Way connecting Knossos both with the harbour town at the mouth of the Kairatos and with the naval station at Amnisos. Years ago Professor Marinatos pointed out to me what appears to be a clear section of the same Minoan way where the modern road from the aerodrome dips to cut through into the Karteros valley.

In December 1938 the Ephor Dr. Platon informed me of the possible existence of a Minoan tomb on this ridge, and permission was granted for me to excavate it on behalf of the British School at Athens. I was assisted by two students of the school, Mr. Vincent Desborough and Miss Vronwy Fisher (now Mrs. Hankey). Miss Fisher kept the catalogue of small finds and is responsible for the published account of them. Mr. Desborough was responsible for the planning and surveying of the tomb, and also for most of the photographs taken during the excavations. Mr. Gerald Young, then Director of the School, kindly came over and took some photographs of the tomb and the inscription (PLATE 10*b*). The foreman was my old friend the late Emmanuel Akoumianos.¹

The first trial trench was opened on 5 December 1938, uncovering four large stones belonging to a tholos tomb (one being a capstone of the fore-chamber and the other three belonging to the vault of the chamber). The first Protogeometric sherd appeared at a depth of 0.30 m. below the surface, and a few L.M. I sherds immediately above the capstones. The following day we uncovered all the roof of the fore-hall intact save for one block missing where robbers had broken in; they had also apparently broken into the chamber, since the lower part of the blocking wall between the fore-hall and the chamber consisted of solid masonry (PLATE 9*c*, *d*), while the upper part was comprised of loose rubble with a gap on the top exposing a Minoan inscription cut in the south jamb of the doorway into the chamber (PLATE 10*b*).

The upper strata of the chamber began to produce a little L.M. IIIC pottery and a large quantity of human bones, including battered skulls, but all in a very bad condition and scattered in all directions. The roof of the tholos had obviously collapsed at an early date, but the complete absence of stratification was probably due either to disturbance by treasure-hunters or to stray persons squatting in the ruins. The tomb consists of a walled but unroofed dromos, a fore-hall with two side-chambers all roofed, and a circular chamber with false vaulting of the ordinary corbelled type. The site is on the top of the ridge, and the surface was probably as flat in Minoan times as it is today. There may have been some denudation since Minoan times, but not, I think, to any great extent. The dromos had been cut in an easterly direction on a fairly steep slope into the native *kouskouras*, that white marl which is so conspicuous a feature in Central Crete, and its axis was perhaps at right angles to the suggested Minoan Appian Way, which must have almost coincided with the modern footpath to Isopata. The dromos as we found it was lined with walls of squared stones and closed at its west end by an undamaged blocking wall of huge and frequently uncut stones. One cut stone, however, in the blocking wall bore a deeply incised mason's mark which we shall discuss later. The dromos wall did not bind

¹ I am also greatly indebted to Mr. Sinclair Hood for taking additional photographs and revising the typescript, though the responsibility for the views expressed must remain mine.

KEPHALA THOLOS TOMB

section AB

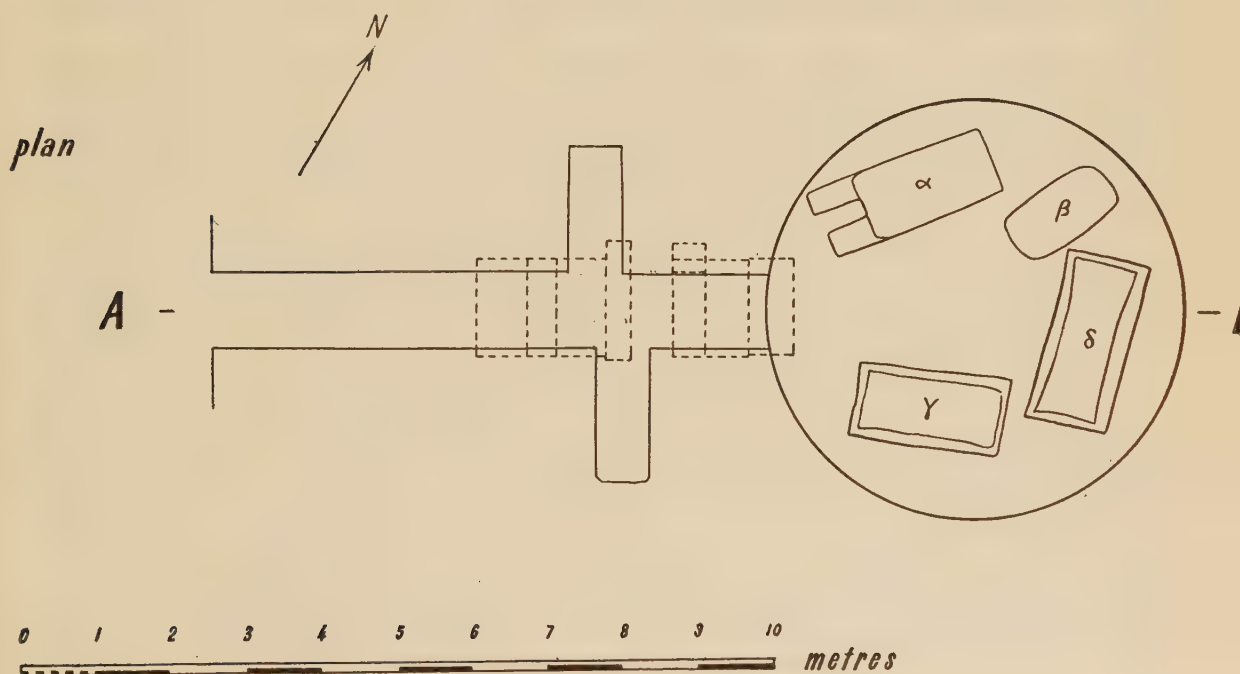
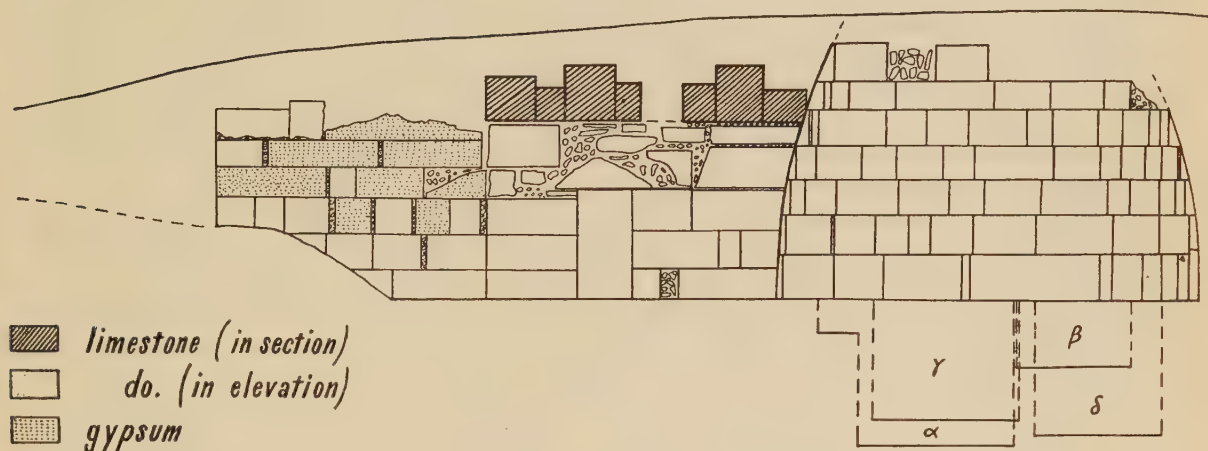


FIG. 1

with that of the fore-hall and contained a number of blocks of gypsum, a material not used elsewhere in the tomb. It is therefore likely that the dromos was originally unwalled, and was later lined with masonry taken from some ruined building containing gypsum blocks. We found no roof slabs from the dromos, but the west blocking wall would have been useless unless there had been some sort of covering, possibly of wood with earth on top.

The line of the dromos was continued by an equally narrow fore-hall with a side-chamber issuing from it on each side. This fore-hall corresponds to what Professor Wace calls 'the doorway' of the Mycenaean tholos; but I have retained the name fore-hall, because the side-chambers recall those of the Royal Tomb at Isopata. The fore-hall of our tomb was roofed with large and roughly trapezoidal blocks of limestone set on edge, and carefully counter-balanced so that the heavier ends faced alternately north and south. The side-chambers were not walled at the back, and we were thus enabled to burrow behind the side walls and obtain valuable evidence for dating the tomb.

Since tholos tombs are usually considered more characteristic of the Helladic mainland than of Minoan Crete, this tomb has naturally been compared to those of Mycenae and it has even been suggested that it was the burial place of a Mycenaean prince ruling at Knossos. Let us then compare it to the Mycenaean series, while bearing in mind Professor Wace's caution that his typology, however valid at Mycenae, is not necessarily equally valid for other districts than the Argolid. Wace's first group, assigned to the sixteenth century B.C., was characterized by short dromoi cut straight in the soft rock, by short straight lintels, and by façades and vaults of rubble masonry. The second group, assigned to the fifteenth century B.C., was marked by ashlar façades, by longer lintels with a relieving triangle above, by the presence of grave-pits in the chamber, and by the better quality of the masonry. The third group (assigned to the fourteenth century) with its long narrow dromoi and sawn conglomerate does not concern us here.

The masonry of our tomb is not far removed from that of the Panayia and Kato Phournos tombs at Mycenae, though much inferior to that of the Lion Tomb. Thus the masonry and the grave-pits recall the second group of tholoi at Mycenae, though the rather short lintel with no relieving triangle above recalls the first groups.¹ The only feature recalling Wace's third group, the walling of the dromos, may be a later addition. The side-chambers opening off the fore-hall on the other hand remind us of the Isopata tomb rather than anything on the mainland. Other features common to our tomb and to the Royal Tomb at Isopata were the use of small stones in the interstices of the ashlar masonry, the presence of masons' marks, and the short, steeply sloping dromos due to the fact that both tombs lie on the crest of the ridge, and were not cut into the slope like most Mycenaean beehive tombs.

The inscription on the jamb of the entrance (PLATE 10*b*) at first glance might seem to favour a date after 1500 B.C., since the first letter  is a well-known character of the Linear Scripts (occurring in both Linear A and B), and very closely paralleled by thirteenth-century examples from Orchomenus.²

The second letter , though resembling a form that occurs in both Linear A and B according to Evans (AB 12 in *Scripta Minoa* ii), is more exactly paralleled by Sundwall, who regards it as a separate character confined to Linear Script A (it is No. 32 in his series). No. 133 in the Hieroglyphic Script also resembles our second symbol, though it is usually regarded as distinct from it. Our first symbol also occurs among the alphabet-form signs on the 'bone fishes' found

¹ The block above the lintel is missing, but since the lintel is wedge-shaped like the other ceiling-blocks of the fore-hall, I think we may assume there was never a relieving triangle.

² Sign AB 49 in *Scripta Minoa* ii. 17.

in a drain-shaft deposit of the Palace of Minos, and dated by Evans 'not later than the sixteenth century B.C.'. It appears therefore that our inscription might on epigraphical grounds be dated as early as M.M. IIIB or L.M. IA, but may equally well be as late as L.M. II.

It is not certain whether the inscription was written when the tomb was constructed or at a later date; but we are entitled to speculate why the inscription was written *en échelon*. It is not due to mere carelessness, as is shown by the fact that the individual letters are perfectly vertical. Was the inscription written by some official, who examined and sealed the tomb after the blocking wall had been broken by the robbers and when the remaining wall finished with a sloping surface? It is not a very satisfactory explanation but I cannot think of a better.

Neither Myres nor Bennett quotes our second symbol in this form, and so I presume both regard it as a variant of AB 12. This view may well be correct, but until more evidence is forthcoming I would prefer to follow Sundwall, or at least to say that the identity of the symbols is non-proven. If we were to employ the Cypriote syllabary to transliterate our inscription we might read it as KU-SI, and we may recall Cretan names (and probably Pre-Hellenic names at that) beginning with KU such as Kydon, Kydas; but according to Dr. Ventris's transliteration of the linear Script B the symbols should be interpreted as A-PI. Whatever may have been the interpretation, however, of this inscription it seems evident that the signs are not to be reckoned merely as masons' marks, and that they were intended to be read by people entering the tomb. The short line (top right in PLATE 10b) I take to be a punctuation mark, though it might be the numeral 1.

But masons' marks are not lacking. One of the roof-blocks of the fore-hall bears a deeply cut mason's mark, which is only partly visible but appears to be the arrow sign (Mark 33 in Sir Arthur Evans's series). Such deeply cut signs are characteristic of the earlier Palace of Minos (that is to say 2000-1700 B.C. approximately), but this block had perhaps been intended for some other building and reused in its present position.

We discovered also two examples of the trident sign (mason's mark no. 27), both neatly incised in the shallow technique characteristic of marks on the M.M. III walls at Knossos; one block was in the bottom course of the south wall of the fore-hall, and the other appeared to have fallen from the dome of the tholos. These masons' marks in the style of the later Palace seem to rule out any date earlier than M.M. IIIB for the construction of the Tomb. A stone of the outer blocking wall bore a deeply cut , Chapouthier's *signe des bras levés*.¹

The tomb probably contains a few intrusive fragments of pottery, and as such I should reckon the occasional sherds of the Geometric, Hellenistic, and Mediaeval periods, and the solitary fragment of a Roman glass cup; but the position of the tomb on the crest of the Kephala ridge and its apparent freedom from early buildings renders it improbable that much material should have washed in from the surface.

There were, however, eighty-odd M.M. III sherds. Some of these sherds were found in the dromos or at high levels in the tholos, but the great majority were found deep in the chamber covered by the fallen dome and the L.M. III material; and twenty-five M.M. III sherds were found in one of the grave-pits.

I have not quoted a large number of coarse sherds which might also belong to the M.M. III period, because it seemed desirable only to quote the unequivocal evidence.

A few M.M. I and M.M. II sherds were also found in the deeper strata of the tholos, and must presumably be explained as derived from the surrounding earth when the cutting for

¹ *Études crétoises* ii. 77, 78; Pernier, *MA* xiv. 432; this stone and the one with the arrow sign must have been reused stones from some building of M.M. I or M.M. II date.

the tomb was excavated. Professor Wace indeed suggested to me that all the Middle Minoan material had been so derived, since he considered it unworthy of the tomb in quality, and would prefer to date the tomb by the similar quantity of L.M. IB pottery, which was well distributed in the deeper levels of the fore-hall and chamber.

To this suggestion I would make two objections. Firstly the earth immediately round the tomb is shallow and somewhat barren, and the nearest deposit of M.M. III material thick enough to account for 80 sherds is a structure about 50 m. east of the tomb, too far away for them to have been washed into the chamber on flat ground. Secondly, supplementary excavations behind the base of the vault of the tholos chamber, behind the walls of the side-chambers, and in the structure of the roof of the south side-chamber and the north wall of the dromos, disclosed only two sherds as late as L.M. IA and some sherds of the M.M. III period. If the tomb had dated from the L.M. IB period one would have expected one or two sherds of that period, and a larger amount of L.M. IA material would have been found in the structure of the tomb or in the filling behind it.

I therefore suggest that the Kephala tholos was built in all probability soon after the beginning of L.M. IA and was reused in the L.M. IB period. Either in the latter period or at some time during the third Late Minoan period the dromos, originally cut in the *kouskouras*, was revetted with masonry which included blocks and fragments of gypsum from some earlier building. In the thirteenth and twelfth centuries B.C. the chamber seems to have been used as a tomb and also as an ossuary, and probably continued as such until the time of the Dorian invasion.

In post-Minoan times the tomb was abandoned, except that perhaps occasionally some Proto-geometric or Hellenistic labourer after digging his vines or pruning his olives may have lunched in the shadow of its walls.

The result of these events is that the earlier burials were completely dispersed, and the majority even of the later skeletal material could not be assigned to any one burial or associated with any particular vases (PLATE 10c, d).

The chamber during its use as an ossuary must have contained the bones of quite a number of persons; but the first three bone deposits to be excavated, all between 0.70 m. and 1 m. below the datum level, were in a very bad condition and produced no skull. The fourth deposit, between 1 m. and 1.70 m., produced two adult skulls.

The fifth bone deposit produced four skulls at a depth of about 2.10 m. below the datum, one from the west and three from the east side of the chamber, the latter being fairly well preserved. To this deposit belong two of the stirrup-vases (PLATE 10d), two decorated globular bowls (PLATE 10c), and a plain aryballos; and we may assume that the skeletal material belongs chiefly to the twelfth century B.C. The vases are entirely Minoan with apparently no Helladic, despite the fact that an Achaean dynasty was presumably ruling in Crete at the time.

The sixth deposit just above the floor of the chamber hardly counts as a bone deposit at all, and the deposit presumably dates from the period when the tomb had been looted but before the tholos had collapsed. The pottery includes no whole vase, but only scattered sherds dating from M.M. IIIA to L.M. IIIA. Two sherds of a M.M. III saucer show signs of burning, but this is exceptional and there was no deposit of ashes.

L.M. IIIA, L.M. I, and M.M. III sherds appear in the fill of the tholos chamber in about equal proportions; but the finest are some fragments of Palace Style amphorae (PLATE 11c). The M.M. III sherds included two fragments of a conical cup with returning spirals in white on the black slip, and the rim of a Vapheio cup with a kidney pattern in white on black. Twenty M.M. III sherds appeared in the lowest half-metre of the chamber, and five

in the rough rubble filling above the only part left intact of the wall blocking the doorway of the chamber.

Shaft-grave Δ , however, contained twenty-three M.M. III fragments, and one sherd with orange paint that must come from a M.M. IA cup, as against only two pieces of Palace Style amphorae and two sherds of L.M. IIIA stirrup-cups. The latter might be intrusive; but the twenty-four M.M. sherds suggest that Shaft Grave Δ might have been dug for a burial as early as the M.M. IIIB period or in the succeeding LM IA period.

In the hope of obtaining material thrown out from our tomb we excavated several trial trenches round it the following May from the 10th to the 16th. Three test pits were opened west of the dromos. Virgin soil appeared in No. 1 at 0.45, in No. 2 at 0.50, and in No. 3 at 1 m. from the modern surface. No. 1 contained one or two M.M. sherds, and a few Hellenistic and Mediaeval sherds; but the other two test pits proved to be quite barren.

On the 13th we started to probe for dating material under one of the blocks south of the entrance to the chamber, and also opened a trial trench inside the ruined modern house lying a few metres south of the tholos. From the first probe under the block we extracted two light-on-dark sherds, probably L.M. IA, certainly not later; they were very poor specimens and might have been M.M. IIIB. The trial pit inside the house provided a mass of M.M. III sherds and one or two L.M. Five more trial trenches were opened between the house and the tholos. All contained foundation walls of poor masonry and abundant M.M. III pottery. The native *kouskouras* was reached at depths varying from 0.60 m. to 0.75 m. On 10 May the back of the wall of the north and south side-chambers and one adjacent wall of the tholos were probed for sherds. The material found was very poor and scanty, but all M.M. III in character.

Inventory of the Finds

1. Ear-ring (PLATE 12a). Gold. L. 0.03 m. Massive, apparently of solid gold throughout. The lower part decorated with fine granulations. The horned ends overlap to clasp the ears. From 'Tomb (?) of the Alabaster Vase': Knossos Survey 151.

2. Fragment of ring (PLATE 12a). Thin gold plate, which evidently in its original state covered a core of some other material. L. as preserved 0.025 m. Original D. c. 0.025 m. W. 3 mm.

3. Rosette (PLATE 12a). Gold leaf. Damaged round the edges. D. 0.026 m.

4. Rosette (PLATE 12a). Very thin gold leaf. Broken, and only about half preserved. D. 0.022 m.

5. Two rivets (PLATE 12a). Bronze, plated with gold. The heads slightly oval, shaped to fit the curve of the handle of the sword or dagger to which they must have belonged. D. of heads 0.013 m. $\times$ 0.014 m. and 0.012 $\times$ 0.013 m.

6. Knife or sickle (PLATE 12b). Bronze. Apparently single-edged with two rivet-holes in tang.

7. Tweezers (PLATE 12c). Bronze. Complete, but broken in three pieces. L. 0.53 m. W. 5-6 mm.

8. Tweezers. Bronze. Fragments, too broken to restore; but the tips were evidently splayed.

9. Tool(?). Bronze. L. 0.062 m. Section more or less rectangular.

10. Finger-ring (PLATE 12d). Bronze. D. 0.021 m. Th. 5 mm. There were fragments of two other similar finger-rings.

11. Ear-ring(?). Thin bronze or copper wire with circular section. Broken in three pieces. D. restorable as c. 0.022 m. There were remains of what seem to be a pair of similar ear-rings stuck together. D. c. 0.022 m.

12. Large pin (PLATE 12c). Bronze. Five joining fragments; head and tip both missing. L. of shaft as preserved 0.13 m. Shaft with circular section (D. c. 6 mm.). The shaft may have been ribbed or fluted, but was too badly corroded for this to be certain.

13. Large pin (PLATE 12c). Head and tip missing. L. of shaft as preserved 0.056 m.; circular section (D. c. 4 mm.).

14. Pin. Thin bronze or copper wire with circular section. Broken, but apparently complete except for the head. L. as preserved 0.09 m.

15. Fragments of bronze or copper plate (PLATE 12c), enough to fill a large cigarette box, varying in thickness from 1-2 mm. Three human teeth showing traces of green corrosion were apparently found with the fragments, which might be remains of a helmet. But the fragments of plate as preserved do not seem sufficient for a helmet, and there is no sign of holes for sewing the metal to some backing. The fragments are more probably therefore from a vase of some kind.

16. Fragment of bronze (PLATE 12c). Twisted like an airplane propeller broken at one end. L. as preserved 0.045 m.

17. Ivory plaque (PLATE 12f). Fragment, broken at the bottom and at the right side. L. 0.038 m. W. 0.022 m.

Th. 6 mm. Carved in low relief with what appear to be two helmets(?), one of them with a plume. The plaque is presumably part of a box. In the right edge is a hole, evidently for fastening this plaque to another which doubtless continued the same scene.

18. Sealstone (FIG. 2). Lentoid (Mus. No. 1608). Black steatite. Damaged at the back, and worn. D. 0.015/16 m. Engraved with what appear to be two women facing each other.

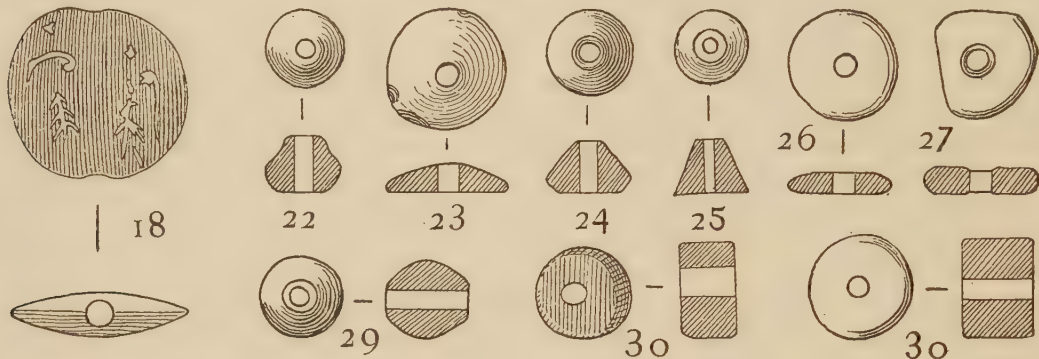


FIG. 2. SCALES 3:2 (18), 1:1 (24-27), 1:2 (OTHERS)

19. Fragment of a mould (PLATE 12e). Purple-green steatite. L. preserved 0.04 m. W. 0.024 m. Th. 0.013 m. The upper side has moulds for making 'sacral ivy' and 'pendant crocus' ornaments. The edge of a third mould is preserved on the under side.

20. Spindle whorl. Conical. Soft light-brown steatite. Finely made and in good condition. D. 0.019 m. Ht. 0.01 m.

21. Spindle whorl. Conical. Purple steatite. Badly damaged. D. 0.023 m. Ht. 0.017 m.

22. Spindle whorl (FIG. 2). Conical. Purple steatite. Rather worn and battered. D. 0.018 m. Ht. 0.013 m.

23. Spindle whorl (FIG. 2). Flat conical. Green steatite. Edges battered. D. c. 0.034 m. Th. 0.01 m.

24. Small spindle whorl or bead (FIG. 2, PLATE 12d). Conical with rounded base. Green steatite. D. 0.012 m. Ht. 7 mm.

25. Small spindle whorl or bead (FIG. 2, PLATE 12d). Conical. Green steatite. D. 0.01 m. Ht. 7 mm.

26. Bead (FIG. 2, PLATE 12d). More or less circular. Black steatite. D. 0.014 m. Th. 3 mm.

27. Bead or pendant of irregular shape (FIG. 2, PLATE 12d). Green steatite. L. 0.015 m. W. 0.013 m. Th. 4 mm.

28. Spindle whorl. Conical with rounded base. Soft brown clay, much perished. D. 0.02 m. Ht. 0.015 m.

29. Bead (FIG. 2). Rounded biconical. Dark brown clay. L. 0.022 m. D. 0.023 m.

30. Eight large beads, cylindrical or sections of cones; one virtually flat (FIG. 2). Orange clay, except for the largest, where the clay is greenish-buff. Three or four of the beads preserve traces of a black or brown lustrous wash. D. varies from 0.021 to 0.033 m. Ht. from 0.015 to 0.03 m.

31. Beads (PLATE 12d). Dark blue-grey faience. One nearly complete, and half of another similar, together with two fragments of others. Moulded in low relief with a double nautilus. The most complete example (L. 0.012 m., W. as preserved 0.01 m., Th. 4 mm.) has the sides broken away, but preserves three parallel string-holes passing from top to bottom.

32. Bead (PLATE 12d). Ribbed. Pale blue faience. D. c. 0.017 m. Th. 10 mm.

33. Fragment of faience. Possibly inlay.

R. W. HUTCHINSON

ANOTHER WARRIOR-GRAVE AT AYIOS IOANNIS NEAR KNOSSOS

(PLATES 13-16)

Position. THIS tomb (Knossos Survey 5) lay about 130 metres east along the most southerly of the roads leading from the main Knossos-Herakleion road to Ayios Ioannis, and some 160 metres due south of the Late Minoan shaft-grave discovered in this area in 1950.¹

The tomb, although of modest size and mutilated before excavation, has more than ordinary interest from the presence in it of a gold cup, the first recorded from an excavation in Crete.² The arms accompanying the single warrior buried in the part of the tomb preserved to us were by no means exceptional in point of decoration and adornment; but they represent the most complete and formidable armoury of Bronze Age weapons that has yet been found in Crete, standing comparison with such 'royal' collections of weapons as those from the Mycenae shaft-graves or the Dendra tholos tomb.

Date. The character of the tomb and of the weapons found in it, notably the association of the cruciform sword 5 with the two short flat-bladed daggers 6, 7, make it interesting to know its date. In the absence of decorated clay vases this is impossible to establish with any degree of certainty;³ but it seems fairly clear that the tomb must be assigned to the period before the destruction of the Late Minoan II palace at Knossos (c. 1400 B.C.). On the other hand the style of the sealstones, and the presence of the flat-bladed daggers, together with the impression made by the finds as a whole, suggest that it is not earlier than Late Minoan IB. It may perhaps

Acknowledgements

I am much indebted to Dr. N. Platon, Ephor of Antiquities for Crete, for authorizing the excavation of the tomb and for all his ready help and co-operation in working on the finds afterwards. To Miss Nancy Sandars I am grateful for looking through the report and discussing various points in connexion with it; to Mr. Jay J. Butler and Miss Isobel Smith for kindly allowing me to see before publication their important paper on the dating of early metal razors in the British Isles (see p. 97, n. 11).

Abbreviations in addition to those ordinarily used in the Annual:

<i>Chamber Tombs</i>	Wace, <i>Chamber Tombs at Mycenae</i> (<i>Archaeologia</i> 82), 1932.	<i>MP</i>	Furumark, <i>The Mycenaean Pottery</i> , 1941.
<i>Chron MP</i>	Furumark, <i>The Chronology of Mycenaean Pottery</i> , 1941.	<i>Prehistoric Tombs</i>	Evans, <i>The Prehistoric Tombs of Knossos</i> (<i>Archaeologia</i> 59), 1906.
<i>Dendra NTs</i>	Persson, <i>New Tombs at Dendra</i> , 1942.	<i>Prosymna</i>	Blegen, <i>Prosymna</i> , 1937.
<i>Dendra RTs</i>	Persson, <i>The Royal Tombs at Dendra</i> , 1931.	<i>Schachtgräber</i>	Karo, <i>Die Schachtgräber von Mykenai</i> , 1930-3.
<i>Gournia</i>	Boyd Hawes, <i>Gournia</i> , 1908.	<i>T do A</i>	Evans, <i>The Tomb of the Double Axes</i> (<i>Archaeologia</i> 65), 1914.
<i>K Ch</i>	Κρητικά Χρονικά.	<i>VTM</i>	Xanthoudides, <i>The Vaulted Tombs of Mesara</i> , 1924.
<i>Mochlos</i>	Seager, <i>Explorations in the Island of Mochlos</i> , 1912.		

¹ *Knossos Survey* 2; *BSA* xlvii (1952) 245 f.

² But there is a gold cup, apparently from Zakro, in the collection of Dr. Giamalakis at Herakleion (*K Ch* vii (1953) 487).

³ The collapsed fill of the tomb produced scraps of pottery, all of it that was recognizable Minoan including some M.M. and a few L.M. sherds, but nothing closely datable.

AYIOS IOANNIS : 1953 L.M. "WARRIOR GRAVE"

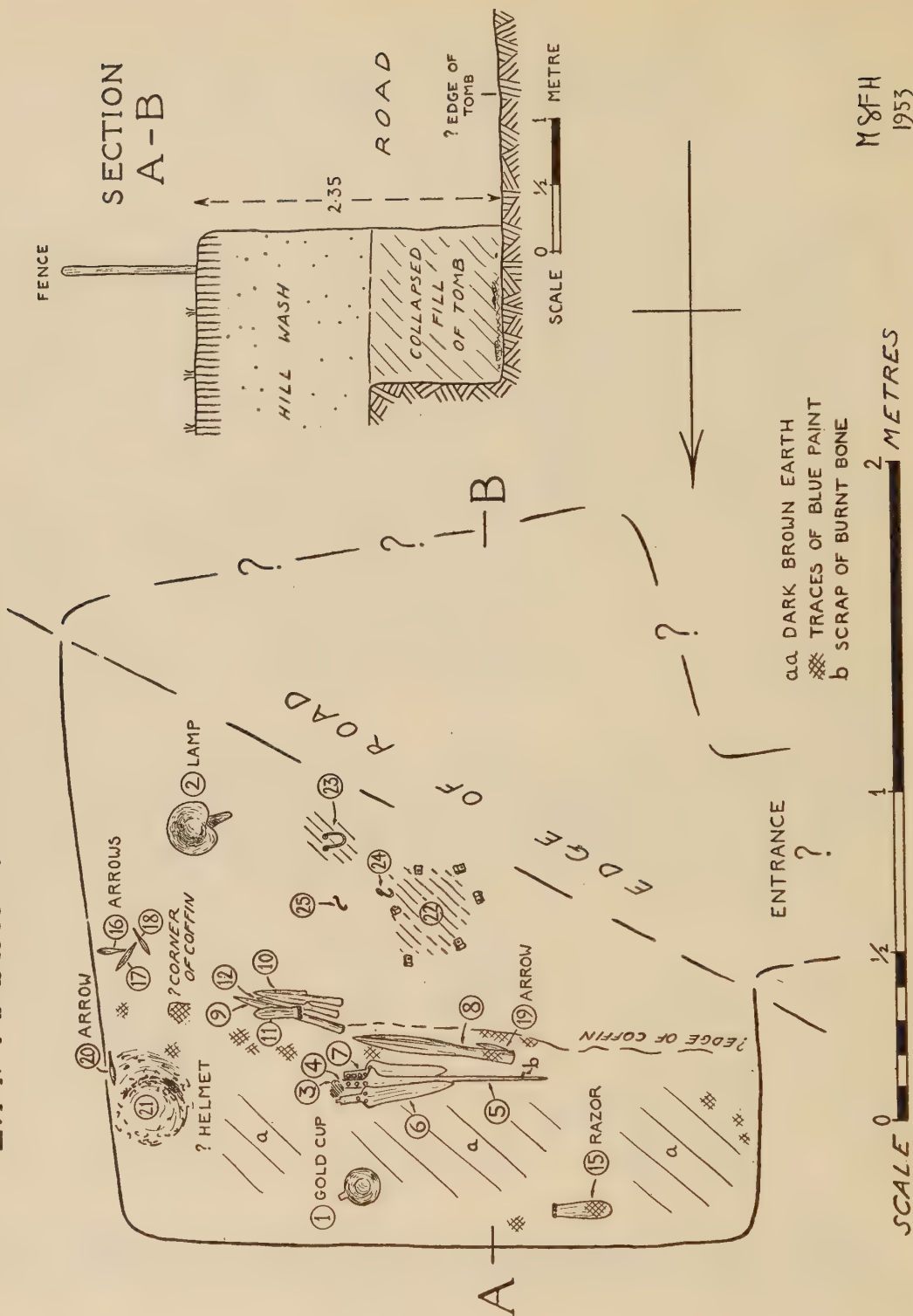


FIG. I

belong to the latter part of that period, which overlaps with the early phase of Late Minoan II at Knossos, say about 1450 B.C.¹

The tomb belongs to that class of 'warrior-graves' which are a feature of the early part of the Late Minoan age at Knossos.² These are 'single-graves', containing one or at most two bodies, accompanied by an array of weapons. It is exceptional to find a large number of clay vases in these 'warrior-graves':³ sometimes there are no clay vases at all with the burials,⁴ or they may be accompanied by one or more squat alabastra,⁵ or by a single stirrup vase⁶, or a lamp as here at Ayios Ioannis. The graves themselves are normally quite modest in size, although some of the Isopata group of tombs were large, and might qualify as 'princely' or even 'royal' graves. But there is no reason to suppose that most of these 'warrior-graves' are in any sense 'royal' or 'princely', although the finds from them, the gold-mounted weapons, or the gold cup as here, are often of a kind that find their best parallels in the great 'royal' tombs of the Mainland.

ACCOUNT OF THE EXCAVATION

In the summer of 1953 a relative of the Head Guard of Herakleion Museum, Charilambos Papadakis, noticed by the side of a newly widened road cutting in Ayios Ioannis fragments of bronze weapons, which were duly collected and taken to the museum.⁷ When he saw the weapons, the Ephor of Antiquities, Dr. N. Platon, at once realized that they were likely to have come from a tomb destroyed or partly destroyed in cutting back the side of the road. Since Ayios Ioannis lies within the boundaries of the Knossos area, and I happened to be working at Knossos at the time, Dr. Platon invited me to search for the tomb and excavate it on behalf of the British School. The School's foreman at Knossos, Manoli Markoyiannakis, was sent to investigate, and detected the collapsed fill of the tomb chamber showing as a darker patch in the soft white *kouskouras* rock in the north face of the newly widened road cutting.

Our tomb seems to have been a small chamber-tomb, with a rectangular chamber, 1.80 m. long and perhaps 2.0 m. wide. The road had been cut back about 1.80 m. on the north side, and rather less than half of the tomb appears to have been destroyed at this time. The floor of the tomb was about level with the surface of the road, at a depth of 2.35 m. below the present surface of the fields on the north. It had been entirely removed in that part of the tomb destroyed when the road was widened.

The entrance and dromos, of which no traces were found, may have been on the west side, to judge from the modern slope of the ground, and from the arrangement of the grave goods in the part of the tomb preserved for us to excavate. The entrance doubtless had a blocking wall of

¹ Platon has given his opinion that the weapons and the lamp belong rather to L.M. II than to L.M. IB (*K Ch* vii (1953) 487). For the overlap of L.M. IB with L.M. II at Knossos, see *PM* iv. 322; *Chron MP* 81.

² See *BSA* xlvii (1952) 243 f. Such 'warrior-graves' include the 'shaft-grave' at Ayios Ioannis and tombs II, III, and V of the new Hospital site (*ibid.* 245 f.); the 'Acropolis' tomb (*PM* iv. 849; cf. ii. 547 and plan opposite: 'Rock Tomb L.M. I'); and Zafer Papoura tombs 36 ('The Chieftain's Grave') and 44. Four other tombs, 42, 43, 55, and 98 at Zafer Papoura, contained cruciform swords but no other weapons (*Prehistoric Tombs*).

The 'warrior-grave' tomb XVIII in the Mavrospelio cemetery (*BSA* xxviii (1926-7) 282) appears to have contained a horned sword together with a dagger with flanged pommel of Furumark's type b 1 (*Chron MP* 93 f.): it may therefore date from the period after the destruction of the

L.M. II Palace, like tombs with daggers or swords of similar type at Zafer Papoura.

Possibly some of the tombs with weapons cleared by Tsountas at Mycenae were 'single-graves' analogous to these 'warrior-graves' at Knossos: Evans almost suggests as much (*PM* iv 852).

³ As in tomb III of the Hospital site with nine vases and three lamps (*BSA* xlvii (1952) 249 f.).

⁴ e.g. the shaft-grave at Ayios Ioannis (*BSA* xlvii (1952) 245 f.); Mavrospelio tomb XVIII (*BSA* xxviii (1926-7) 282).

⁵ e.g. tomb V of the Hospital site (*BSA* xlvii (1952) 252); the 'Acropolis' tomb (*PM* iv. 849).

⁶ e.g. tomb 44 at Zafer Papoura (*Prehistoric Tombs* 62).

⁷ The two spear-heads 11 and 13. Whether any other objects besides the two spear-heads were found in the destroyed part of the tomb is uncertain. The men who had been working on the road said not.

stones in the usual manner, but I could get no confirmation that any stones which might have come from the blocking wall had been noted when the road was widened.¹

The northern part of the tomb, which was left for excavation, appears to have contained the body of a single warrior. Whether the two spear-heads **11**, **13**, recovered from the roadside, had belonged to this warrior or to another, buried in the part of the tomb that had been destroyed, is of course uncertain; but there was nothing to suggest that there had been a second burial in the tomb. Our warrior had been placed with his weapons and other personal possessions in a wooden coffin or larnax against the north wall of the tomb. Bone scraps enough to fill about half a small cigarette box were recovered from the area where the body might be expected, and these were the only traces of the skeleton which survived. But from the way that the weapons and

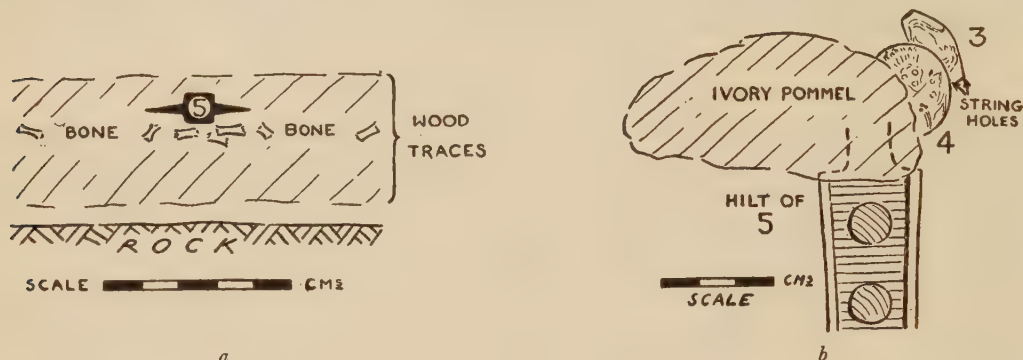


FIG. 2

other objects in the tomb were arranged, it seems fairly probable that the warrior lay with his head to the east facing the presumed entrance on the west.

The traces of bone were best preserved in the area of the bronze sword and daggers (**5**, **6**, **7**). These had apparently been put inside the coffin, either upon the chest of the dead warrior or by his left side; for the weapons themselves were resting about 3 centimetres above the rock floor, with bone scraps and brown wood traces below them to within half a centimetre of the rock, while above them was a thin layer of wood traces with occasional flecks of the blue paint² with which the coffin had evidently been adorned (see plan, FIG. 1, and FIG. 2*a*).

Indications of the coffin were fairly distinct throughout the northern part of the tomb as areas of dark-brown earth, with occasional patches of a still darker brown, which even preserved a suggestion of the grain of the wood. Rare flecks of black carbonized wood on the floor of the tomb may have belonged to the coffin, or might have been scattered from the lamp **2** (see below, p. 86). The brown discoloration that seemed to indicate the coffin made a reasonably clear edge running roughly parallel to the north side of the tomb at a distance of about 0.60 m. from it. About 0.25 m. from the east wall of the tomb a patch of brown earth with blue paint appeared to make a kind of corner, which might mark the position of one corner of the coffin. The coffin is likely to have been something over 1 metre but less than 1.50 m. in length, to judge from the wooden coffin found by Alexiou at Katsamba (c. 1.30 m. long × 0.45 m. wide), and the analogy of the many clay coffins evidently imitating wooden originals from Late Minoan III tombs at Knossos and elsewhere in Crete³ (see below, p. 86).

¹ A blocking wall of mud-brick was observed by Tsountas in a tomb at Mycenae (*AE* 1888, 129 and 142: tomb 24. Cf. Tsountas and Manatt, *The Mycenaean Age* 133).

² See below p. 86 and n. 4.

³ But the wooden coffin at Dendra appears to have been about 1.90 m. long and 0.55–0.60 m. wide (*Dendra NTs* 111).

A fragment of burnt bone was resting on the blade of the sword **5** (*b* on plan, FIG. 1), and a few other scraps of burnt bone were recovered from this area; these may conceivably represent the remains of a burnt offering left on top of the coffin at the time of burial. The dagger **6** partly overlay the sword **5**, which lay above the other dagger **7**. The hilts of these weapons had probably been placed by the hand or hands of the dead warrior;¹ for immediately below the remains of the ivory pommel of the sword **5** were two sealstones, a Lentoid **4** with an Amygdaloid **3** underneath it, both lying face upwards (FIG. 2*b*). The warrior had no doubt worn these gems round his wrist, which was the normal way of carrying sealstones at the time. The Cup-bearer on the fresco from Knossos has a sealstone on his wrist, and a bracelet composed of twelve gems encircled each wrist of the prince in the un plundered grave-pit below the floor of the Vapheio tholos tomb.²

One of our sealstones, the Lentoid **4**, is engraved with a spirited rendering of a lion attacking a young bull; the Amygdaloid **3** has a picture of a lion lying down with its head turned back over its shoulder. These and allied subjects involving lions, whether solitary, or with other lions, or attacking their prey, were very common on gems of the Palace Period at Knossos, as the deposits of seal impressions found in the Palace itself bear witness.³ It is therefore probably just a coincidence that the only two gems from tomb 99 of the Zafer Papoura cemetery were engraved with subjects—a lion rending a young bull, and a lion lying down with its head turned back—exactly similar to those on our sealstones.⁴

The razor **15** lay almost immediately above the rock floor of the tomb; but it may have been placed inside the coffin, since there were traces of the brown discoloration that appears to represent wood remains in the narrow gap of a centimetre between it and the rock, while resting above it was a patch of the blue paint with which the coffin had been adorned.

The gold cup **1** was standing upright just above the floor of the tomb, and like the razor **15** may have been placed inside the coffin. The large spear-head **8** may also have been inside the coffin, to judge from the considerable traces of blue paint above it. But in that case the shaft must certainly have been broken or removed before the spear was put in the tomb. There were no signs of wood remains in the socket of this, or indeed of any of the other spear- or javelin-heads (**9**, **10**, **12**);⁵ but the shafts, if they had ever existed, may quite well have left no traces, seeing how slight were the vestiges of the wooden coffin that had survived. These smaller spear- or javelin-heads (**9**, **10**, **12**) were found glued together by corrosion, with the peculiar small heavy blade **14** above **9**, and **12** at the bottom.

Of the five arrow-heads, three (**16**, **17**, **18**) were in a group together, while a fourth (**20**) lay not far away on its side against the east wall of the tomb; but the fifth (**19**) was actually recovered from beneath the socket of the large spear-head **8**. The six arrow-heads in tomb III of the Hospital site were found similarly scattered, and it was suggested that they might have been originally in a quiver hung from a peg driven into the wall of the tomb.⁶

The fragments of copper wire **21** were recovered from an area, roughly circular and about 0.30 m. across, at the east end of the tomb. Some were found on the rock floor of the tomb; but

¹ In tomb II of the Hospital site the hilt of the gold-mounted sword lay by the right hand of the warrior (*BSA* xlvii (1952) 249). Cf. *Prehistoric Tombs* 52: tomb 36 ('The Chieftain's Grave').

² Tsountas and Manatt, *The Mycenaean Age* 145: 'so at either hand lay a heap of twelve engraved gems, the two heaps obviously once forming a pair of bracelets'. The warrior in tomb 36 ('The Chieftain's Grave') in the Zafer Papoura cemetery had evidently been wearing three gems together on his left wrist (*Prehistoric Tombs* 52). The left

wrist may have been the normal place for wearing sealstones, to judge from the Cup-bearer fresco and other evidence cited by Evans (*PM* ii. 705, fig. 441 and col. pl. xii). Even gold signet rings may have been worn on the wrist (*Prosymna* 209, 273).

³ *PM* iv. 582 f., 601 f. ⁴ *Prehistoric Tombs* 89, fig. 101.

⁵ The tips of the shafts were preserved in the sockets of the spear-heads II (4) and III (14) from the tombs on the Hospital site (*BSA* xlvii (1952) 267, 271 and n. 137).

⁶ *BSA* xlvii (1952) 251 n. 23. Cf. *Hesperia* xvii (1945) 157.

they were most heavily concentrated from about 0.10 m. and upwards above the floor. At 0.10 m. above the floor they appeared to form a circle round a space free from wire fragments, about 0.18 m. in diameter.¹ From their manner of concentration, and from the position in which they were found at what was evidently the head end of the coffin, it is tempting to regard these wire fragments as connected in some way with a helmet of leather or some other perishable material. The helmet might have been set on top of the coffin above the head of the dead warrior, like the turbans of Turkish warriors in more recent times.²

The six bronze clips **22** had clearly gripped the rounded rim of an object, perhaps a vessel of wood or of some other material represented by patches of brown discoloration in this area. The discoloration showed no trace of grain, and the material may have been something like leather rather than wood. The handle **23** and the hooks **24**, **25** doubtless belonged to the same object as the clips.

The lamp **2** was standing upright on the floor of the tomb. It preserved traces of decoration in unfixed colours, blue and red; and may be compared with a group of lamps and other vases painted in unfixed colours, which have been found in several of the great tombs of this period round Knossos, and which Evans thought had been designed specifically for sepulchral and even symbolic use (see below, p. 92). Certainly the inside of our lamp showed no very aggressive signs of burning; and it may have been employed, if at all, only once, on the occasion of the burial.

NOTE ON WOODEN COFFINS OF THE LATE MINOAN PERIOD IN CRETE

Traces of wooden coffins have been found in several tombs dating from the early part of the Late Minoan period in the Knossos area. What may have been a pair of such coffins was observed in tomb I of the Hospital site.³ In the same year 1953 a wooden coffin in an exceptional state of preservation with remains of blue paint on a white base was discovered by Alexiou in an important tomb containing pottery of L.M. IIB/IIIA 1 style on the outskirts of the harbour town of Knossos at Katsamba.⁴ Several others were noted in tombs of the beginning of the L.M. III period in a cemetery on Gypsades south of the Palace at Knossos, excavated in 1955.

These wooden coffins may well have resembled the rectangular clay coffins (*larnakes*) with gabled lids, of which many examples have been found in tombs of the Late Minoan III period at Knossos and elsewhere in Crete. These clay coffins or *larnakes* doubtless, as Evans and Xanthoudides thought, reproduced the ordinary wooden chests of household furniture used at the time.⁵ The wooden coffins from tombs of the early part of the Late Minoan period in the Knossos area may therefore be nothing more than household chests transferred to sepulchral use, in the same way that bathtubs and (in Middle Minoan times at least) storage jars were often employed to contain the dead.

Such household chests may have been objects of furniture richly decorated and highly prized, like the Marriage Chests adorned by painters of the Renaissance in Italy. Certainly it seems from the evidence so far available that at Knossos during the Late Minoan period wooden

¹ Unfortunately the wire fragments at a height above 0.10 m. from the floor were removed by the workman before their position could be studied.

² It was suggested that the bronze helmet from tomb V of the Hospital site might have been placed on top of a wooden coffin (*BSA* xlvii (1952) 253 and n. 27). But the boars' tusks, almost certainly the remains of a helmet, were by the feet of the skeleton in tomb 55 at Zafer Papoura (*Prehistoric Tombs* 66, fig. 72).

³ *BSA* xlvii (1952) 248 and n. 18.

⁴ *KCh* vi (1952) 11 f. Alexiou suggests that the 'greyish blue layer', described by Persson as covering the remains of the coffin at Dendra (*Dendra NTs* 112), may have been vestiges of similar blue paint.

⁵ *AE* 1904, 12; *Prehistoric Tombs* 8 f. Evans says that these clay *larnakes* are in fact 'little more than translations into clay of the wooden chests that played an important part in the furniture of contemporary Egyptian houses, and which also at times served a funereal purpose'.

chests or coffins were only used in the richer tombs. This may, however, turn out to have a chronological rather than a social or economic significance, since wooden coffins would appear to be more characteristic of the early part of the late Minoan period (L.M. I/II-III A), while the typical rectangular clay larnakes with gabled lids hardly occur in tombs before the beginning of Late Minoan III.¹

On the other hand clay coffins, designed it seems specifically for sepulchral use, are a regular feature in tombs of the ripe Middle Minoan period at Knossos. But these Middle Minoan coffins are normally oval, and whether oval or rectangular they do not have feet or gabled lids like the Late Minoan III larnakes; nor do they appear to be imitating wooden counterparts.² The Middle Minoan clay coffins probably therefore represent a different tradition from the wood-imitating gabled larnakes of Late Minoan times.

THE GOLD CUP I

(FIG. 5, PLATE 13a, b)

The gold cup has a maximum diameter of 0.11 m., and a height of 0.037 m. to the rim. It is made of pale gold, really gold alloyed with silver, or electrum. It is virtually complete, although battered and cracked by the weight of the collapsed fill of the tomb; a few scraps of the metal have become detached on one side.

The cup is made from a single piece of sheet gold. The handle is simply a tail of gold bent over from the rim, not attached by rivets either above or below. The rim is nearly 1 millimetre thick, but the rest of the vase is exceptionally thin, half a millimetre or less. This makes the cup extraordinarily light to handle; it weighs now 68 grammes, or perhaps just over 70 grammes in its original state.³

The cup is decorated in *repoussé* with a band of double running spirals set above an 'arcade' pattern of classic form in the intervals between them. There are thirteen spirals and arcades in all. The bottom of the cup has a central hollow or omphalos, encircled by a bold channel.

A minute depression, less than 1 millimetre across, in the very centre of the bottom must have something to do with the process by which the cup was made. A similar depression was noted by Persson on the base of the Octopus Gold Cup from the tholos tomb at Dendra.⁴

Base. The omphalos surrounded by a channel on the bottom of our cup is interesting. This treatment of the base does not appear to have been noticed in the publication of Bronze Age metal vases found in Greece to date.⁵ But it is seen on a silver cup identical with ours, except that it is plain and undecorated, recovered from what was evidently a tomb a few hundred metres east of the museum at Herakleion in Crete.⁶ It also appears, although in a somewhat

¹ Clay larnakes, including one with a cover ending in two human heads, are reported by Platon from a L.M. II tomb at Pervolia near Mallia (*KCh* viii (1954) 516. Cf. *JHS* lxxv (1955) suppl. 'Arch. in Greece, 1954', 17).

² Many have been found during the last few years in the Middle Minoan cemetery on the slopes of Ailias east of the Palace (e.g. *JHS* lxxiv (1954) 166, fig. 15a). Cf. *BSA* xxviii (1926-7) 291, fig. 20: from the Mavrospelio cemetery; Seager, *The Cemetery of Pachyammos* (*Univ. Pa. Anthropological Publications* vii, no. 1) *passim*, plates iii and xii.

³ There was nothing, however, to suggest that the gold had merely served as an outer skin for a cup of wood or some other perishable material.

⁴ *Dendra RTs* 31, Frontispiece and pl. xi. 'In the centre of the bottom of the outside can be seen a small hollow caused by a pointed tool, probably used during the construction

to fix the centre so that the cup should be a true circle.' The base of the silver cup inlaid with bulls' heads from Enkomi may display the same phenomenon, to judge from the colour Suppl. pl. D in Schaeffer, *Enkomi-Alasia* i.

⁵ It might be inferred that the concentric circles painted on the underneath of the bases of some Aegean Late Bronze Age clay vases were ultimately derived from an imitation of this system of concentric channels on the bases of metal vases. But concentric circles appear most characteristically on squat alabastra modelled upon stone rather than upon metal originals.

⁶ The tomb would have been on the west edge of the harbour town of Knossos. The approximate position is indicated by three red crosses with 'Minoan Tombs' beside the bridge over the 'modern road' in *PM* ii, fig. 131A, opp. p. 230. Cf. *Adelt* 2 (1916), 168. The cup is Herakleion

cruder form, on at least one of the gold cups from the Mycenae Shaft-graves.¹ Still earlier, but in exactly the form that it is found on our cup (or sometimes with the omphalos surrounded by a double channel) this treatment of the base occurs on many of the 153 silver cups from the extraordinary deposit in the Temple of Montou at Tôd in Upper Egypt.² This deposit, consisting entirely of lapis lazuli and precious metal, mostly silver, apparently dates from the reign of Amenemhet II (about 1937 B.C. onwards). The silver cups themselves are thought to have been made, if not in Crete itself, then by Minoan craftsmen or native craftsmen working under Minoan influence, in some part of Syria or Palestine.

It is worth noting that a flat copper dish from the Treasure of Priam (A) at Troy, usually assigned to Troy II, has a somewhat comparable base with a bold omphalos centre surrounded by a single channel.³ The bottom of a bowl from Handlova in Slovakia, related by Childe to one of the earliest groups of metal vases made in Central Europe, is treated in a rather similar way.⁴ In this connexion may be mentioned the base with concentric corrugations of the gold cup found in a Bronze Age barrow at Rillaton in Cornwall.⁵ The Rillaton cup has already been compared by Piggott on other grounds with vessels from the Mycenae Shaft-graves.⁶

Shape. A gold cup remarkably like our own in size and shape, but with a plain base and no decoration round the sides, was found by Soteriades in a grave-pit below the floor of the tholos tomb at Marathon.⁷ This cup is also made from a single sheet of gold, including the handle.

From Crete itself come other cups of this type made of metal, although not of gold. The silver cup from Herakleion has already been described (p. 87). Three similar cups of plain bronze were found with the famous gold signet ring in a tomb ascribed to Late Minoan I at Mochlos.⁸ These were evidently made including the handle from a single sheet of very thin metal.⁹ Only one was preserved and illustrated; the profile looks much like that of our cup, although the rim (D. 0.135 m.) appears to have been more everted.

Comparable are a number of silver cups found by Schliemann in the Shaft-graves at Mycenae, notably one from Shaft-grave I (Karo No. 213) with a D. of c. 0.14 m., and another from Shaft-grave IV (Karo No. 519) with a D. of 0.11 m. like our cup, but with a more everted and thickened rim. Both these small cups are made in one piece with their handles, which are not riveted.¹⁰

Museum No. 405 (unpublished). The 'silver vessels and pottery' from this group of tombs are ascribed by Evans to the 'beginning of the Late Minoan Age' (*PM* ii. 235). I am very much indebted to Mr. S. Alexiou for these references.

¹ *Schachtgräber* no. 313: Shaft-grave IV. Now on view again in the National Museum at Athens.

² F. Bisson de la Roque, G. Contenau, F. Chapouthier, *Le Trésor de Tôd* (*Docs. de Fouilles de l'Inst. Fr. d'Arch. du Caire* t. xi (1933) pl. xvii and *passim*).

³ Schmidt, *Schliemanns Sammlung*, no. 5817.

⁴ *ActArch.* xx (1949) 260, fig. 4. This similarity is the more pertinent in view of the remarks on pp. 262 f.

⁵ The base is figured in Evans, *Ancient Bronze Implements of Great Britain* 408, fig. 509.

⁶ 'The Early Bronze Age in Wessex': *PPS* n.s. iv (1938) 95.

⁷ *PAE* 1933, 35 f. for an account of the excavations; *ibid.* 1934, 29 f., figs. 1-3 for the gold cup; *ibid.* 1935, 101, fig. 5, and 105, fig. 6a, for a plan of the tomb. Cf. *AA* 1935, 179, figs. 10-11. I am grateful to Mr. D. Smollett for bringing this reference to my notice in the first instance. The pottery from the tomb was examined by Dr. F. H. Stubbings in the National Museum at Athens before the war (*BSA* xlii (1947), 7). He has generously placed at my disposal his notes made at the time. The pottery was 'very poor (and

ill-preserved)'. The few complete or nearly complete vases included 'a very flat and broad alabastron with extraordinarily thick walls'; fragments of a large ?jug with a vertical wavy stripe design (akin to Furumark's *MP* no. 67, 9-10 (Myc. IIIA)); also fragments of large kraters and three-handled amphorae with stripe and/or wavy band decoration. Dr. Stubbings kindly informs me that he would now admit an earlier date for the pottery than he was inclined to suggest in *BSA* xlii. But in any case, as he points out to me, the gold cup may well be considerably earlier than the clay vases in the tomb, even if they were all placed in the tomb on the same occasion of burial, which is not certain.

⁸ *Mochlos* 89, fig. 26A. This L.M. I burial with the gold signet ring and the cups was above the earlier tomb IX.

⁹ The other two cups according to Seager were 'shallow bronze bowls of much the same size, unengraved and of very thin metal'.

¹⁰ *Schachtgräber* no. 213, pl. clxviii; no. 519, pl. cxxvii. Somewhat similar, but with riveted handle, is the silver cup *ibid.* no. 509, pl. cxxvii. Cf. the silver cup from the King's Grave in the tholos tomb at Dendra (*Dendra RTs* 33, no. 6, fig. 29); also the cup with inlaid heads from Mycenae tomb 24 (*AE* 1888, pl. 7. 2). Less comparable are the silver 'bowl' from the Vapheio tomb (*AE* 1889, 153,

With cups of this type may be compared a series of large bronze 'basins' of somewhat similar shape with handles found in early Late Minoan contexts at Knossos. One of these has the handle made in one piece with the basin. It was found together with three other bronze basins having riveted handles in the North-west Treasure House.¹ Evans believed that this group of bronze basins was buried by the catastrophe which took place during Late Minoan IA (*PM* ii. 647). But a plain bronze basin of similar type, having the handle in one piece with the vase, came from Isopata tomb 4, assigned on grounds of the associated pottery to the beginning of Late Minoan III.²

Decoration. The decoration on our cup is paralleled in a remarkable way by the spirals and arcades round the shoulder of a silver jug from Shaft-grave V at Mycenae.³ The design on this jug is virtually identical in every detail with the design on our cup, except that the spirals on the jug have three instead of only two convolutions. It is interesting to note that Evans, in comparing this jug from Shaft-grave V with another found together with the bronze basins in the North-west Treasure House, thought it possible to suppose that both jugs might have been manufactured in the same palatial *atelier* at Knossos.⁴ Evans assigned these two jugs to the transitional period, Middle Minoan IIIB–Late Minoan IA. But the distinctive arcade pattern of the Shaft-grave jug and our cup, when it appears in painted form on clay vases, is admittedly later, Late Minoan IB or Late Minoan II.

The arcade pattern is derived by Furumark from the disintegration of a spiral network design, in which the linked spirals have been replaced by solid disks.⁵ He cites as an early example of the pattern, showing clear traces of its origins, a sherd from Zakro of transitional Middle Minoan IIIB–Late Minoan IA.⁶ Another 'early' version appears on a jug from Phylakopi with argonauts of the classic Late Minoan IB 'marine style' above.⁷

Furumark suggests that the influence of *repoussé* bronze work may have helped to make the arcade pattern a popular motif of decoration on clay vases in Late Minoan IB. A jug with a neck ring from Palaikastro, assigned by him to Late Minoan IB, has a band of running spirals above arcades extremely reminiscent of the designs on the Shaft-grave jug and our cup; but the 'knobs', survivals of the solid disks of the original net pattern, which ought to appear at the base of the arcades, here seem to have been truncated.⁸

pl. 7. 15) and the cup from the South House at Knossos (*PM* ii. 387, fig. 221): these have markedly everted rims like the large bronze 'basins' from Knossos discussed below, and are reminiscent of the shallow clay cups with high handles and everted rims imitating metal originals, which correspond to Furumark's type 237 (Myc. I–IIB).

¹ *PM* ii. 642, fig. 402, 407a, b. These basins are of course all much larger than our cups; the largest has a rim D. 0.39 m. Similar bronze basins were found in a Basement Cell by the Stepped Portico associated with an L.M. IA vase (*PM* ii. 632, fig. 395). Cf. the basin, presumably of metal, depicted on a Linear B tablet (ibid. 633, fig. 397).

² *T do A* 19, no. 4e, fig. 31: D. 0.25 m. Another example, but with a decorated rim and riveted handle analogous to the bronze basins from the Northwest Treasure House, was found with the great cache of bronze vases in the 'Tomb of the Tripod Hearth' (*Prehistoric Tombs* 39 and 36, fig. 33b). Evans assigned this tomb to L.M. II (*PM* ii. 635 f.); but the tall-stemmed bronze kylix and the sword of Furumark's type c 2 should belong to L.M. III. Furumark is inclined to date the tomb later, on the grounds that the kylix is of a type 'probably corresponding to the later part of Myc. IIIA2' (*MP* 58, n. 6). Another similar handled 'basin', compared by Persson to those from Knossos, was found with the group of

metal vessels in the pit below the floor of Chamber Tomb I: 5 at Asine (Persson, *Asine* 394, no. 6, fig. 257).

³ *Schachtgräber* no. 855, pl. cxxiv. Another metal vessel bearing a similar design of spirals above arcades, although entirely different in style and much inferior in execution, is the bronze bowl with omphalos base from tomb 47 at Mycenae (*AE* 1888, pl. 9. 28. Cf. Tsountas and Manatt, *The Mycenaean Age* 73, fig. 20; *MP* 158, n. 6). The silver cup from Enkomi has inlaid arcades below the bulls' heads (Schaeffer, *Enkomi–Alasia* i. 379 f.).

⁴ *PM* ii. 645 f., fig. 411. Cf. Evans, *Shaft Graves and Beehive Tombs* 29, for the suggestion that both jugs might come from the same workshop. Evans compares the jugs to the picture of one carried by an envoy of Keftiu in the tomb of Senmut, vizier of Hatshepsut.

⁵ *MP* 158, and Motive no. 66.

⁶ *PM* ii. 472, fig. 278a; *MP* 158, n. 5. Evans had interpreted this design as 'bulbous plants linked together in a conventional manner'!

⁷ *MP* 158, n. 7; *BSA* xvii (1910–11), pl. 11. 140.

⁸ Bosanquet and Dawkins, *The Unpublished Objects from Palaikastro* (*BSA Suppl.* i) 43, fig. 32. The design is compared by the authors with that of the newly discovered Kakovatos amphora.

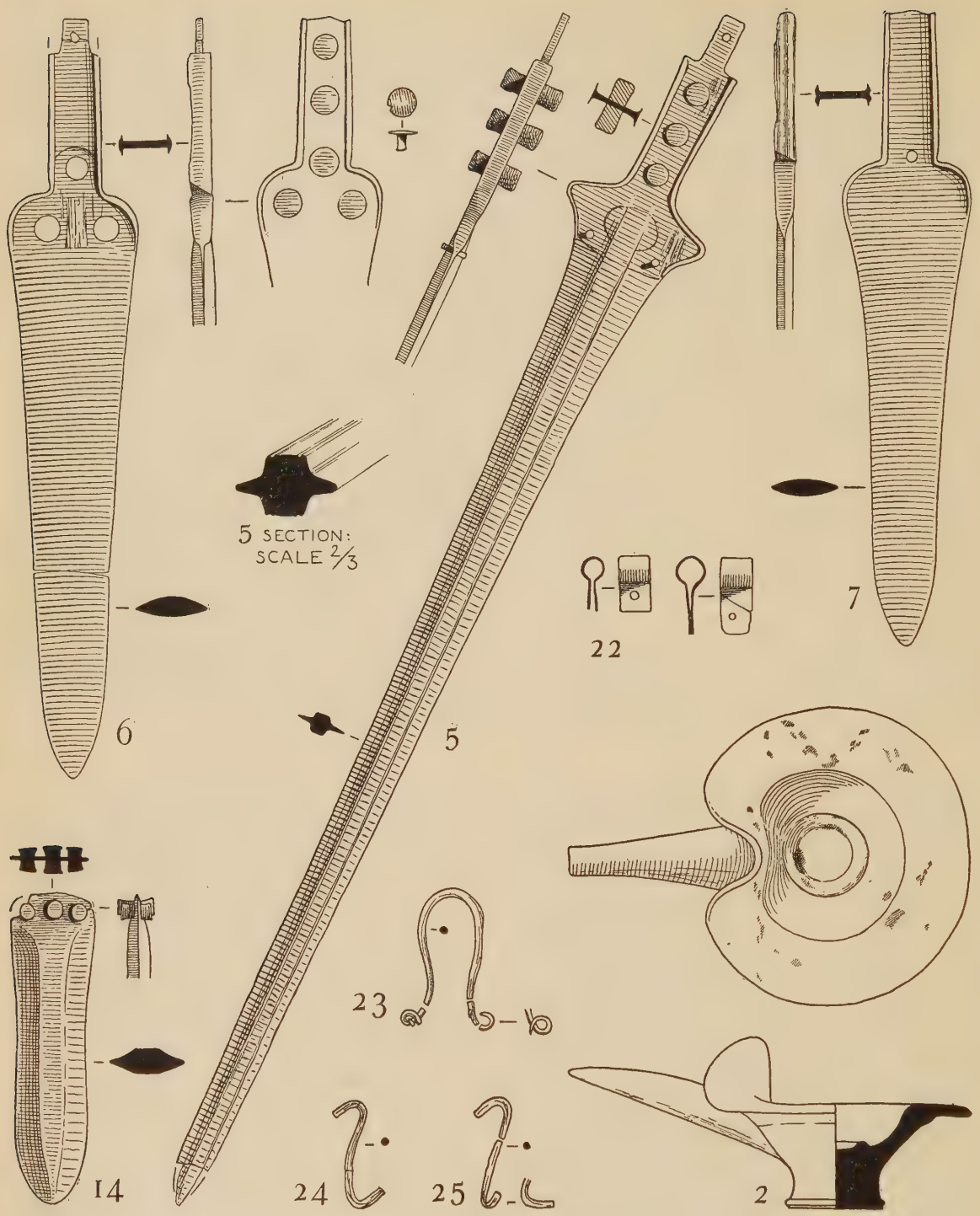


FIG. 3. SCALE 1:3

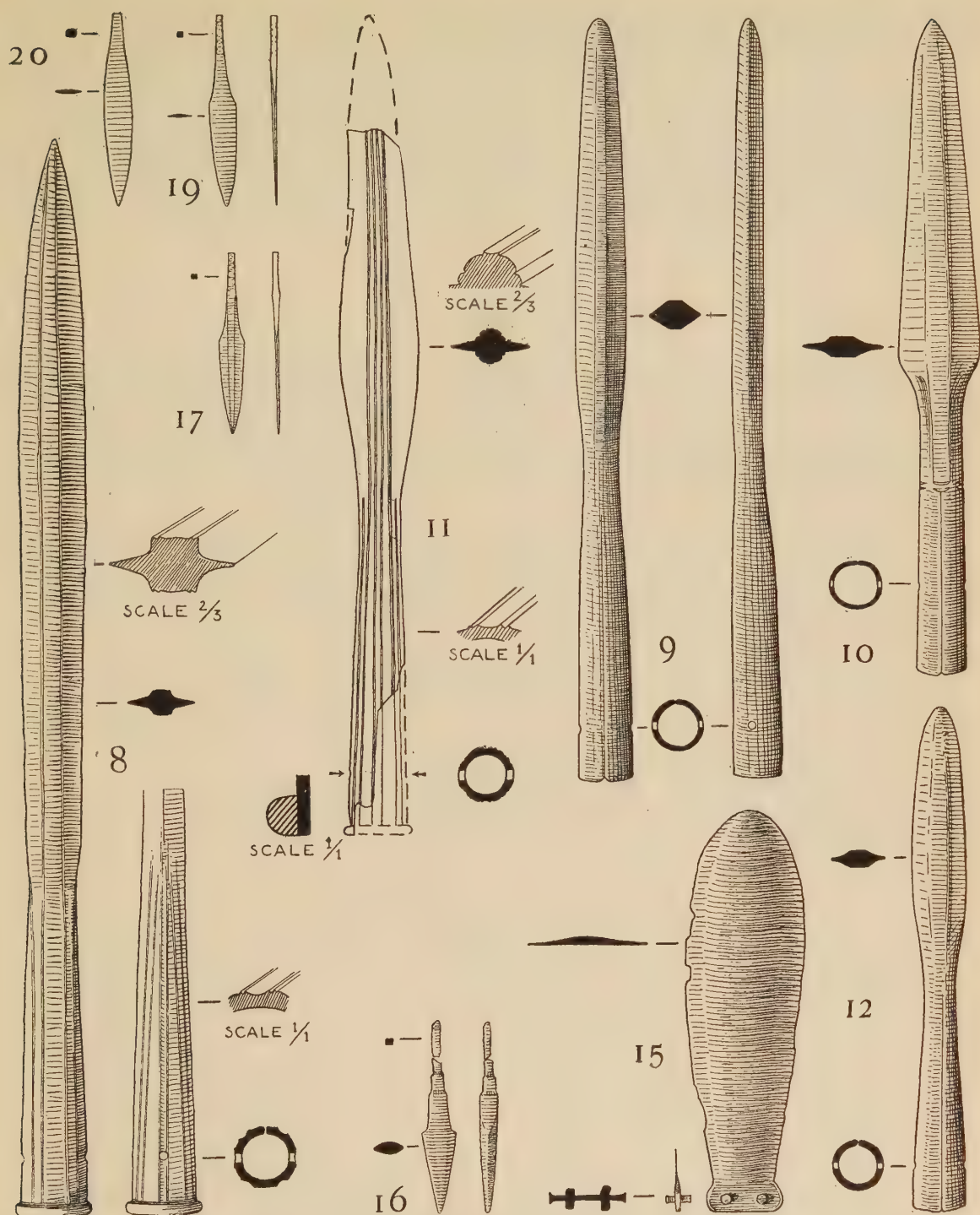


FIG. 4. SCALE 1:4

A developed arcade pattern with bands of running spirals above it appears on the fine Palace Style amphora from Tholos A at Kakovatos, assigned by Furumark to Myc. IIA, which corresponds on his system to Late Minoan IB in Crete.¹ Another Palace style amphora with an almost exactly similar design was found in the Berbati tholos tomb.¹ The arcades on these vases are virtually translations into paint of those which appear in *repoussé* on our cup and on the jug from Shaft-grave V.²

Date. The shape of our cup, and the similarity of the decoration with that on the jug from Shaft-grave V, might suggest that it was manufactured early in Late Minoan I. But from the analogy of the similar painted decoration on clay vases, a date in Late Minoan IB is not excluded.³

THE LAMP 2

(FIG. 3, PLATE 15*b*)

Broken but complete. L. with handle 0.185 m. W. 0.14 m. Ht. 0.078 m. Orange clay, with traces of blue paint on top of the rim and inside the bowl. When the earth was removed from inside the bowl, what appeared to be faint indications of red paint came away with it. The lamp is carefully made, with a high foot and a 'metallic' ridge round the base. The bowl has a raised rib round the inside forming a shallow inner saucer, which is virtually an atrophied 'candlestick' centre.⁴

Lamps of a similar type are commonly found in tombs of the Late Minoan period round Knossos, and a number of them preserve traces of paint in unfixed colours. Evans called such painted lamps 'incense burners' or 'fumigators', and thought that they were intended solely for funeral use.⁵ But admittedly one lamp of this type with polychrome decoration was found with Late Minoan I vases in a room of the palace at Ayia Triadha.⁶

For other lamps with painted decoration in unfixed colours, see *PM* iv. 1011 f., fig. 962, pl. xxxv: two from the Temple Tomb (L.M. IIIA1). Cf. *BSA* xlvii (1952) 269, III (10-11): two from the Hospital site tomb III (L.M. II); no. 10 has a 'candlestick' centre. Several tombs in the Mavrospelio Cemetery produced fragments of such lamps (called 'braziers'); one very fine example with polychrome decoration is illustrated (*BSA* xxviii (1926-7) 294, fig. 45, V. 13). The tomb at Katsamba with the wooden coffin and the alabaster jar bearing a cartouche of Thothmes III produced seven lamps, most of them painted blue, and one having polychrome decoration (*K Ch* vi (1952) 11).

Very similar in shape to our lamp is one from Isopata tomb 5 ('Tomb of the Polychrome Vases'), which Evans compares to the lamp from A. Triadha with polychrome decoration (*T do A* 28, fig. 38). Evans (*ibid.* 30) would date this tomb to L.M. I rather than L.M. II on the strength of a comparison between the vases painted in unfixed colours from it and those from A. Triadha. Another lamp which looks rather similar to ours with a ridge round the base and 'central socket' was found in the Mavrospelio Cemetery (*BSA* xxviii (1926-7) 294, fig. 46, IX B. 12).

For other lamps of similar shape belonging to this period, see *Prehistoric Tombs* 87, fig. 118: tomb 98c, found with a cruciform sword and 'razor', but no other clay vases. Cf. *ibid.* 49,

¹ *MP* Motive no. 66 (Myc. IIA), citing (1) Kakovatos: *AM* xxxiv (1909), pl. xvii; (2) Berbati: *ILN* 15/2/36, 279, fig. 13.

² In a somewhat degenerate form divorced from spirals the same design appears on a Palace Style amphora from the Isopata Royal Tomb (*MP* 183, n. 11; *Prehistoric Tombs*

159, fig. 144; *PM* iv, fig. 291); and on a jug from Mycenae dated by Furumark Myc. IIA late (*Chamber Tombs*, pl. iii. 2).

³ An L.M. IB date for our cup has been suggested by Platon (*K Ch* vii (1953) 487).

⁴ For 'candlestick' centres, see *PM* i. 579.

⁵ *PM* iv. 1011.

⁶ *T do A* 28, fig. 39 a and b.

figs. 46 and 118: tomb 32. Both these lamps have a ridge round the base, but they are much taller than ours. A lamp from Isopata tomb 1 (L.M. II) is described by Evans as similar to that from Zafer Papoura tomb 32. Part of another of the same type was found in the 'Tomb of the Double Axes' itself (*T do A* 13 and 59, 2 v).

Lamps like these appear to be rare on the Mainland. The clay lamps from Dendra, and a solitary example recorded from Prosymna, are of quite different types (*Dendra NTs* 102 f.; *Prosymna* 455 and 211, fig. 535, no. 997). But there is one from Mycenae (*Chamber Tombs*, pl. xlv. 45).

THE SEALSTONES 3, 4

(FIG. 5, PLATE 14a-d)

3. Sealstone. Amygdaloid with fluted back. Carnelian, speckled with black. L. 0.020 m. W. 0.011 m. Th. 7 mm. String-hole D. 2 mm. There is a small chip out of the stone by the string-hole at one end, but no appreciable signs of wear round the string-holes. Faint scratches on the engraved surface of the stone may, however, be due to wear.¹ The subject engraved is a lion lying down with its head turned back and tail raised.

4. Sealstone. Lentoid, slightly oval in shape. Pale translucent agate, yellowish shading to white, with opaque white bands. L. 0.025 m. W. 0.023 m. Th. 0.012 m. String-hole D. at one end 2 mm., at the other 2.5-3 mm. The stone is in very fine condition, except for a flaw on the engraved face near the tail of the bull. There are no appreciable signs of wear on the surface or round the string-holes. The subject is a spirited rendering of a lion attacking a bull.

The Reverend V. E. G. Kenna, after studying the gems from photos and impressions, writes: 'The differences between the two gems in style and technique are so great, that unless the Amygdaloid is a talismanic stone—which in view of its subject is unlikely—we are forced to conclude that the differences point to two origins. The engraver of the Lentoid for instance seems to have had a greater range of tools and skill at his disposal than the engraver of the Amygdaloid. This can be clearly seen in the treatment of the limbs and hooves of the animals on the Lentoid.

'Whereas the Lion on the Amygdaloid is conceived as a form composed of masses in straightforward and almost geometrical relationship with each other, the Lion and the Bull on the Lentoid show a far more complicated scheme. In the treatment of the Lion and the Bull something of the fine Cretan sense of curvature and movement is seen. In the Amygdaloid the technique restricts the style and expression of the forms. But in the Lentoid technique is subsidiary to style and design.

'*The Amygdaloid.* The excellence of the material (carnelian) and the finely modelled shape of the stone appear to be at variance with the poor quality of the engraving. The style of the Lion moving or lying to the left with head turned back seems to have been affected by the technique. The engraver used what tools he had with little variation. The same-sized wheel appears to have been used to engrave the head of the Lion, its body and hind quarters. A second smaller tool, which was responsible for the legs, claws, beard and hair of the mane, has also been carelessly used to engrave the tail. The hind quarters have been curtailed to allow for a somewhat unusual and perhaps unintentional angle of the tail. The feet and claws resemble those of a griffin. In technique our Lion resembles similar subjects on haematite Amygdaloids which are usually dated L.M. III: similar is the structural treatment of the neck, shoulders and forelegs which give an angle of 90°. But there are differences, since on some of these haematite

¹ The back of the stone is smooth and appears to show no signs of wear, as if it had not been exposed to damage, by contrast with the engraved face. This might suggest that the engraved face was worn outwards.

Amygdaloids a ground line appears, and on them the subject is either violently twisted or statically angular. With our Amygdaloid, while the impression in the plaster gives a certain curvature, the engraving on the gem itself shows an inherent angular structure; and there is no ground line.

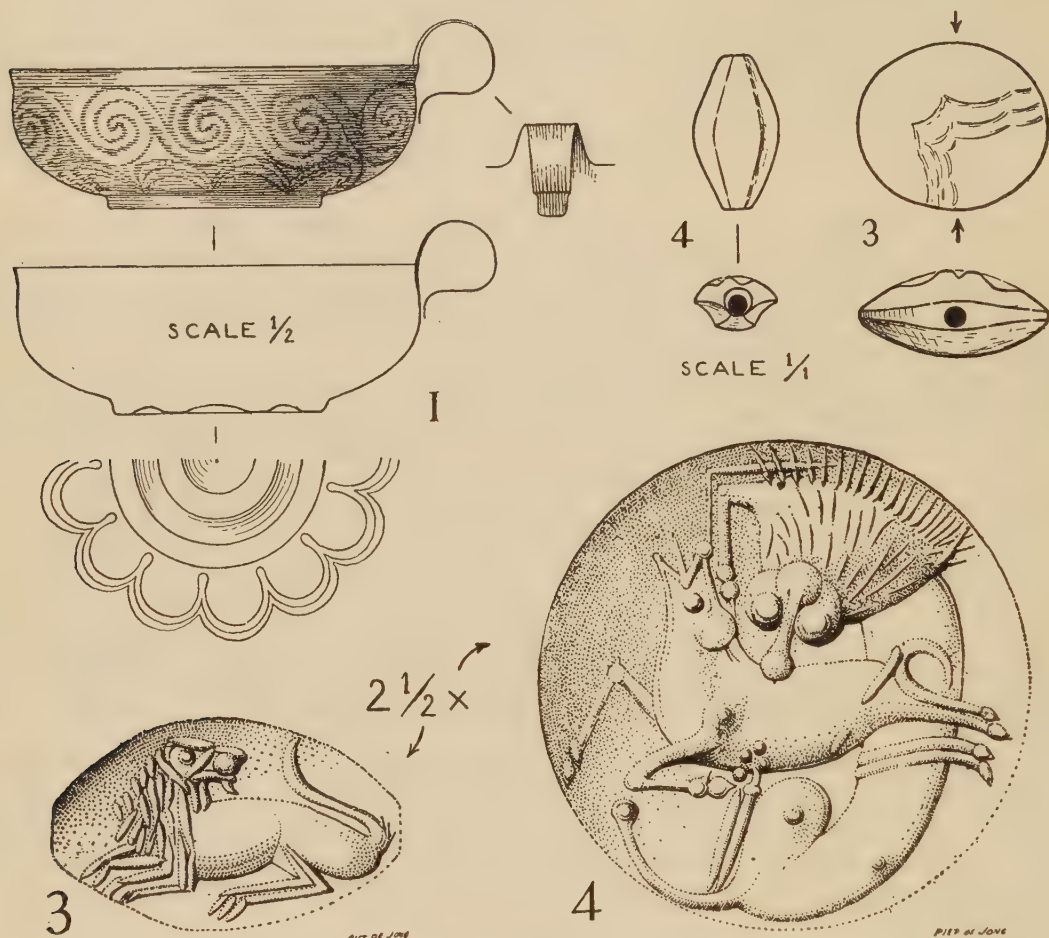


FIG. 5

‘What therefore would be considered discrepancies in a gem of such fine material if it were of Cretan workmanship, would cause no surprise if the gem were from another source. This gem should be compared with the fine carnelian Amygdaloid with a Lion in the Southesk collection (0.31), and with another from the Vapheio Tholos Tomb (*AE* 1889, pl. 10, 27). In the former a natural movement is made by curvature to fit the field, and in the latter a more monumental treatment is highly integrated. Both the Southesk and the Vapheio gems appear to be Cretan work.

‘A third gem from Mycenae (*AE* 1888, pl. 10, no. 12) is also of some importance, for by its geometric character it appears to be the end of a process of which our gem shows the earlier stages. In our gem the excellence of the material and the fineness of shape contrast with a subject which shows certain primitive features, and whose style and technique are relatively poor.

These mixed characteristics would seem to suggest the Mainland as its place of origin. Indeed it may be compared with other gems of similar characteristics now considered to be Mainland. It may perhaps be dated to Myc. IIB, a little after 1450 B.C.

'*The Lentoid*. Here the excellence of the material is matched by the style of the engraving and by much of the technique.

'The work combines some of the stylistic and technical details associated with the finest L.M. IB engravings, together with some new characteristics. The Bull's head is thrown back in an agonized poise, and the front legs paw the ground in the attempt to escape capture. The modelling of the body is delicate, and that of the legs and hooves very fine. The subsidiary line engraved under the chest to enhance its depth is extended up to the open mouth and nostril (cf. British Mus. 66; Ashmolean Mus. 1938, 969). The hind legs of the Bull are thrown violently to the rear, so that its body is roughly horizontal to the Lion's vertical attack. For although the body of the Lion conforms as a whole to the curvature of the field, the main tendency in form is vertical, as against the horizontal stretch of the Bull.

'Thus a X design is achieved, softened by natural curvature. The shoulder of the Lion appears disproportionate, since the craftsman has combined front and side views. This has the effect of making the right foreleg of the Lion strangely angular and small. The marking of the mane also betrays a little uncertainty or haste. In some ways the style and treatment relate this gem to the fine clay stamp engraved with a similar subject (Herakleion Mus. 1302); but more directly to a gem from the Vapheio Tholos Tomb (*AE* 1889, pl. 10, no. 21).¹ In the latter gem, which is remarkably similar to ours, a Lion attacks a Bull; but in this case the Lion grips the belly of the young Bull with its jaws, while its hind legs engage the head of the animal. This and our gem might have been engraved by the same craftsman. Since at present they cannot be physically compared, there can be no certainty on this point; but the resemblance is striking, particularly in the treatment of the bodies. If a technical distinction could be made, it might be said that on our gem the body of the Bull was more finely and dramatically engraved than on the Vapheio gem; but the body of the Lion on the Vapheio gem is more realistic than on ours.

'It is suggested that our Lentoid is Minoan work of L.M. IB; for there is still an insistence upon verisimilitude, and the Minoan preference for torsion is balanced by a sensitiveness to natural form. It may however be a little later than the Vapheio Lentoid no. 21, although deriving from the same school. It is perhaps a little earlier in date than the Amygdaloid; but in view of the apprenticeship of the Mainland, the technical clumsiness of the Amygdaloid might suggest a contemporary date.'

THE BRONZES 5-25

A veritable armoury of weapons accompanied the dead warrior. These included a sword, two daggers, a large thrusting spear, smaller spears or javelins of various types, and arrow-heads.

The sword 5 is of the standard cruciform type most characteristic of the last Palace Period (L.M. II) at Knossos.² It is only remarkable for the ivory pommel and for the unusually massive bronze rivets in the hilt.

The short flat-bladed daggers 6, 7 are noteworthy, if, as appears most probable, our tomb dates from the period before the destruction of the Late Minoan II palace. Two similar daggers, presumably from Crete, are in the collection of Dr. Giamalakias at Herakleion.³ Two others

¹ The solitary clay cup from the Vapheio tholos tomb is classified by Furumark as Myc. IIA, contemporary on his system with L.M. IB (*MP* 629-30, no. 262: 5).

² *PM* iv. 851. Cf. *Prehistoric Tombs* 110: Zafer Papoura cemetery; *BSA* xlvii (1952) 255, &c.: Hospital site and

Ayios Ioannis tombs.

³ *K Ch* iv (1950) 109, nos. 355 and 357. One found at Thebes in Egypt is described by Naue, who regards it as an import from the Aegean (Naue, *Die vorrömischen Schwerter* (1903) 10).

from adjacent tombs (III, XLIII) at Prosymna are assigned by Blegen to his type *d*, and are alleged to have been found in 'deposits belonging definitely to L.H. III'.¹ The same type, but with a flanged pommel, and normally with a square rather than a rounded shoulder, appears in the third period of the Late Bronze Age (L.M./L.H. III) throughout the Aegean area.²

The great thrusting spear **8**, just over half a metre long, is the largest yet found in Crete and comparable with the giant (L. 0.57 m.) from the Dendra tholos tomb.³ The smaller spear-heads **9–13** may have been mounted on short shafts as throwing spears or javelins: this was almost certainly the case with the simple small heads like **12** and **13**.⁴

The small heavy blade **14** with silver-capped rivets belongs to a type recognized from the Late Minoan II period at Palaikastro.⁵ One similar was found at Mochlos,⁶ and another with gold-capped rivets in Shaft-grave V at Mycenae.⁷ Since our blade was lying in a pile together with the three small spear-heads **9**, **10**, **12**, it might seem possible that it had been hafted as a spear rather than a dagger. But in appearance at any rate these blades seem comparable to the larger 'dagger' blades of the same type from the Mycenae shaft-graves and from other 'Transitional' (M.M. IIIB–L.M. IA) and early Late Bronze Age contexts in the Aegean.⁸

Five arrow-heads **16–20** were recovered from the tomb. Three of these, **17–19**, are in an extraordinarily fine state of preservation, and the tangs show very clear traces of minute nicks, which were evidently made to increase the purchase on the shaft.

It has been suggested (see p. 86) that the wire fragments **21** might have come from a helmet. These wire fragments are in every way comparable with the 'staples' found in tomb III of the Hospital site. At the time it was thought that these had been employed for fastening the leather part of a figure-of-eight shield to its wooden centre-piece.⁹ But the blunt ends of the 'staples' are not very suitable for penetrating wood; and it seems more likely that the 'staples' in the Hospital Tomb, like the wire fragments in our tomb, are merely the broken remains of lengths of copper wire used for fastening leather to leather.¹⁰

The razor **15** is of a leaf-shaped type familiar in this period both at Knossos and on the mainland. One very similar, but with three instead of two rivets, was found with mature Late Minoan II pottery in tomb III of the Hospital site.¹¹ There were six examples in the Zafer Papoura cemetery, and one of these at least came from a grave of the Palace Period.¹² Evans

¹ *Prosymna* 336 f. But that from tomb III, which closely resembles our **7**, was found in a context which would appear to permit a date in L.H. II (*ibid.* 184). The inlaid dagger blade from this tomb was admittedly of L.H. II date.

² The 'later' type of dagger of this shape with a flanged pommel is included by Blegen in his type *d*; there were three examples from Prosymna of these daggers with a flanged pommel besides the two like our **6** and **7**. For other examples see (1) Naue, *op. cit.* 10, pl. v, 3, 3a: from Corinth; (2) Montelius, *La Grèce préclassique* i. 153, fig. 481: from the Athens Acropolis hoard; (3) *ibid.* pl. 13, 1–4, 7–9: from Crete, Rhodes, Mycenae, and Dodona; (4) *AE* 1904, 30, fig. 7: two from Moulana (Crete) tomb A; (5) *ADelt* 1919, 118, fig. 34: two from the same tomb in Cephallonia; (6) *Dendra RTs* 97, no. 23, pl. xxxiii: two from the pit below the door in chamber tomb 2; (7) *Dendra NTs* 55, fig. 35. 1: shaft V in tomb 7.

³ *Dendra RTs* 37, no. 18.

⁴ See *BSA* xlvii (1952) 256, apropos of the similar spear-heads AJ (4) and I (11). Cf. *ibid.* xxxvii (1936–7) 187 f.

⁵ *BSA Suppl.* i. 116, type K (pl. xxiv. p, q, r): 'solidly made pointed daggers'. The description alleges a 'definitely marked midrib'; but from the photos these blades appear to be like ours.

⁶ *Mochlos* 75, fig. 45, tomb XX. 9: L. 0.13 m. Seager observes that this blade 'has a very late look and might well be classed as of M.M. III date'; he believed that there was nothing later than M.M. III in this tomb.

⁷ *Schachtgräber* no. 749, pl. xci: L. 0.12 m.

⁸ e.g. *BSA* xlvii (1952) 269. III (13) and n. 135.

⁹ But the 'staples' might still come from a figure-of-eight shield if the stitching that appears in representations like the Shield Frescoes from Knossos and Tiryns was of metal wire (e.g. *PM* iii. 301 f., pl. xxiii). Alternatively the 'staples' might have belonged to a helmet or a coat of armour. Armour composed of leather scales appears to be mentioned on tablets from Nuzi of about 1400 B.C. (Starr, *Nuzi* i. 541). For remains of metal scale armour of the Late Bronze Age from the Aegean see Blegen, *Troy* iii, fig. 297, 34–389, 34–400, 35–368 and p. 23, 297: from a late Troy VI context. Cf. Starr, *Nuzi* i. 475, pl. 126; Woolley, *Alalakh* 278, pl. lxxi.

¹⁰ Such a helmet might have been composed of scales, or of strips like that depicted on the vase from Isopata tomb 5 (*T do A* 27, fig. 37b).

¹¹ *BSA* xlvii (1952) 271. III (15), fig. 12, pl. 53b.

¹² *Prehistoric Tombs* 117.

ventured to recognize these implements as razors; and the character of the blades, which are either extremely thin, or else as in our example humped one side and flat the other,¹ together with the small size of the rivets holding the handle, does indeed suggest that they were intended for some specialized and delicate operation like shaving.

Several of these blades were found in Late Helladic tombs at Prosymna, and Blegen classifies them as 'knives' (type *b*).² Of the twelve examples assigned to this type, seven (Nos. 9-15) from L.H. III contexts appear to be very similar to 'razors' like ours. One other (No. 8) which looks similar to ours is assigned to L.H. II. The others (Nos. 4-7) dated to L.H. I and II have larger rivets and do not appear so comparable.

But some of the blades from the Mycenae Shaft-graves discussed by Karo³ as possible razors, notably one without a number from Shaft-grave IV or V, are clearly comparable with 'razors' like ours.⁴ Moreover, certain blades from Crete, apparently found in Middle Minoan contexts, look very similar in shape and character to our 'razors'. Karo cites a group from the Mesara tholos tombs, Koumasa and Platanos;⁵ another from Mochlos⁶ is perhaps significantly figured by Montelius⁷ side by side with a Late Minoan 'razor' from Zafer Papoura resembling ours.⁸ As other early examples of this type of razor from Crete Karo mentions two blades from the bronze hoard in the South House at Knossos, assigned by Evans to L.M. IA.⁹ These Evans describes as 'two-edged knives'; one has a metal hilt.

This last is reminiscent of a curious leaf-shaped blade (L. 0.185 m.), having a strong flanged tang with rivet-holes, which came from the un plundered grave-pit in the Vapheio tholos tomb and might conceivably be a 'razor':¹⁰ there was certainly no other implement in this well-equipped prince's grave that could be regarded as one. Somewhat like it is a 'thin tongue-like blade' with a tang from Platanos, which should presumably be assigned to Middle Minoan times.¹¹

Inventory of the Bronzes

5. Sword with cruciform hilt (FIG. 3, PLATE 14*e*). The metal corroded throughout; the blade broken in three pieces; the tip broken and largely missing. Overall L. including the tip 0.62 m. W. across the shoulder 0.07 m.

The blade has a thick midrib, rectangular in section, with

grooves running down the top along each edge. The hilt and shoulders are flanged; and the wooden hilt plates, of which considerable traces survived, were kept in place by three large solid bronze rivets (D. 0.012 m.) in the hilt, and by two small rivets at the top of the blade. The crescent

¹ Like that illustrated in *Prosymna*, fig. 606: Tomb XXVIII.

² *Prosymna* 332 f.

³ *Schachtgräber* 222 f.

⁴ *Ibid.* 156, 140, fig. 57: no number. Cf. esp. no. 422, pl. xcvi: Shaft-grave IV; no. 931, pl. xcvi: Shaft-grave VI. There were several other similar 'razors' from Shaft-grave IV, and others from Shaft-graves II, V, and VI; but none apparently from the women's graves I and III.

⁵ *VTM* 28, no. 1196 from Koumasa tholos B; *ibid.* 108, no. 1905, from Platanos: Xanthoudides refers to four in all of this type, 'thin tongue-like blades all of the same shape, with two or three rivets by the straight base'. L. 0.09-0.11 m.

⁶ *Mochlos* 49, fig. 45: tomb IV. 18. L. 0.155 m. Described by Seager as a 'curious knife blade of almost oval shape', and dated by him to M.M. III.

⁷ Montelius, *La Grèce préclassique* i, pl. 16, 22-23.

⁸ *Prehistoric Tombs* 70, fig. 78.

⁹ *PM* ii. 629, 630, fig. 393 g, h.

¹⁰ *AE* 1889, 158, pl. 8, 7.

¹¹ *VTM* 108, pl. lvi no. 1941. The blades from the Vapheio tomb and from Platanos have tangs. A short tang-like projection appears on many leaf-shape 'razors' like our 15. Evans (*Prehistoric Tombs* 117) points out the curious fact that

'leaf-shape razors with a tang are only found again, *longo intervallo*, in the British Isles'.

These British razors are discussed by Mrs. Piggott (*PPS*, n.s. xii (1946) 121 f.; her Class I). They are smaller than our 'razors', and normally but not invariably have tangs. Those without tangs have rivet-holes at the base of the blade, and closely resemble Aegean 'razors' like our 15. Mrs. Piggott assigned these Class I razors to the British Late Bronze Age (c. 800 B.C. onwards), and thought it likely that they originated in the British Isles as a development of some of the tanged and double-edged flint blades of the local Early and Middle Bronze Age.

But Mr. Jay J. Butler and Miss Isobel Smith ('Razors, Urns and the British Middle Bronze Age', *Inst. of Arch. Annual Report for 1955*) have shown that (1) these Class I razors were already in use during the Middle Bronze Age in the British Isles (c. 1400 B.C. onwards); (2) there are potential relatives for the British Class I razors in the Middle Bronze Age Tumulus Culture of South and North-west Germany.

It is therefore not impossible that the British leaf-shaped razors of Class I are ultimately derived from Aegean models, whether directly or through the medium of early Central European razors of similar shape.

shape of the wooden hilt plates was clearly visible on the shoulder. There is a small rivet-hole in the tang for affixing the ivory pommel, of which a good deal was preserved (see FIG. 2).

6. Dagger (FIG. 3, PLATE 15a). Broken and much decayed; the blade swollen and split by corrosion. L. 0.355 m. W. across the shoulder 0.06 m. The shoulders are rounded, with flanges which continue along the hilt. The hilt has a short tang with a small rivet-hole for affixing the pommel. There are three large rivet-holes, one at the base of the hilt (D. 0.011 m.), two in the shoulder (D. 0.012 m.). The wooden (ivory?) hilt plates ended in a more or less straight line across the shoulder, and were held in position by wooden (ivory?) pegs passing through the three large rivet-holes. Considerable traces of the hilt plates and pegs survived.

Cf. *K Ch* iv (1950) 109, pl. I', no. 355. L. 0.324 m.: similar, but has two more large rivet-holes in the hilt, and the blade is much narrower and somewhat shorter. Ibid. no. 357 is more like our 7 below.

7. Dagger (FIG. 3, PLATE 15a). Complete and unbroken, but badly decayed; the blade split along the edges by corrosion. L. 0.295 m. W. across the shoulder 0.059 m. Like 6, but there is no tang, and only one small rivet-hole (D. 5 mm.) at the base of the hilt. An ornamental groove runs down the flanges on the hilt, but does not continue round the shoulder.

Four rivets were found above, five below the hilt; these have wide heads, flat or slightly curved to fit the curve of the wooden hilt plates which they had evidently decorated. The heads were mostly much damaged; the largest and best preserved had a D. 0.014 m., L. 0.011 m.; all the nail ends seem to be blunt.

Cf. *Prosymna* 336, no. 17, fig. 462 (Tomb III), which is almost identical; no. 18, fig. 485 (Tomb XLIII) has two small rivets; but ten broad-headed rivets also found in this tomb may have adorned the hilt plates.

8. Spear-head (FIG. 4, PLATE 14e). Complete and unbroken, but badly decayed; the edges of the blade split by corrosion. L. 0.504 m. W. of blade 0.032 m. D. of socket 0.029 m., of ring round the base of the socket 0.034 m., of the inside of the socket 0.024 m. The blade is somewhat bent, but whether before burial or by the weight of the collapsed fill of the tomb, is not clear. The narrow leaf-shaped blade merges into the socket, which is split, and has a pair of rivet-holes (D. c. 2 mm.) and a ring round the base.

The socket is decorated with six shallow fluted channels, flanked by twin ridges on each side. Four of the channels merge into the wings of the blade, while the twin ridges on the midrib side of them continue down along the top outside edges of the rectangular-sectioned midrib. The other two channels, in which the rivet-holes are cut, become narrower as they approach the base of the blade and appear to stop there.

Cf. *BSA* xlvii (1952) 271 and n. 136 (III. 14) with references; 275 (V. 7).

9. Spear-head (FIG. 4, PLATE 15a). Good condition. L. 0.357 m. Blade narrow, but very thick and heavy (W. 0.025 m. Th. 0.014 m.). The socket squashed to an irregular oval (W. 0.023–0.025 m.). The socket is split, but the split is

entirely closed. There are a pair of rivet-holes at the base; one of them preserves evidence of having been made by forcing through or withdrawing some kind of rod or stick while the metal was still soft.

Cf. *Prehistoric Tombs* 55, fig. 57 (36f.), from Tomb 36 ('The Chieftain's Grave'); somewhat similar but shorter, with a blade of a different shape, and a ring round the base of the socket.

10. Spear-head (FIG. 4, PLATE 15a). Fairly good condition. Stuck together by corrosion with 12 when discovered. L. 0.305 m. W. of blade 0.038 m. D. of socket 0.025 m. The blade is somewhat ogival. The midrib continues for some way down the socket. There are slight hollows at the base of the blade, and four pairs of curving grooves round the upper part of the socket at the point where the midrib ends.

Cf. *BSA* xlvii (1952) 261 (AJ (3)) and 256, for the suggestion that this type of decoration may be derived from an imitation of the binding that helped to fasten earlier socket-less blades to their shafts.

11. Spear-head (FIG. 4). Found before the excavation (see p. 84). Corroded and broken in many fragments; the tip and part of the socket missing. L. as preserved 0.33 m. W. of blade 0.037 m. D. of socket c. 0.027 m., of ring round the base of the socket c. 0.032 m. The blade is distinctly ogival. The socket is split, and has a pair of rivet-holes (D. 6 mm.), and a ring round the base. From the section in the break it seems clear that the ring was made separately from the socket and not cast with it. The socket is decorated with four shallow fluted channels flanked by pairs of grooves on each side. Four of these channels merge with the angles between the midrib and the blade; the other two continue along down the top of the midrib.

12. Small spear-head (FIG. 4, PLATE 15a). Fairly good condition. Stuck together by corrosion with 10 when discovered. L. 0.24 m. W. of blade 0.028 m. The socket squashed rather oval (W. 0.024–0.026 m.). The blade is leaf-shaped with a low flat midrib. The socket is split, and has a pair of rivet-holes near the base.

Cf. *BSA* xlvii (1952) 262 (AJ (4)), which is exactly similar, and ibid. 256 for a general account of this type of spear-head.

13. Small spear-head. Found before the excavation (see p. 84). Corroded and broken; most of the blade including the tip, together with the mouth of the socket, missing. L. as preserved 0.18 m. W. of blade 0.03 m. Same type as 12.

14. Small riveted blade (FIG. 3, PLATE 15a). Corroded, and broken round the rivets at the base; a small piece at one corner of the base missing. L. 0.15 m. W. at the base 0.04 m. The blade is short, but very thick and heavy, and has a slightly ogival profile. The three large silver-capped rivets (D. c. 8–9 mm. L. from 0.010 to 0.014 m.) have heads sloped to fit the curve of the shaft or handle (see p. 96).

15. Leaf-shaped 'razor' (FIG. 4, PLATE 15a). Broken in two pieces and corroded throughout; the edges chipped and damaged. L. 0.19 m. W. of blade 0.055 m., of hilt 0.035 m.

The blade is flat on one side, but humped on the other (p. 97 n. 1). There are slight flanges 2 mm. thick on each side of the hilt, which has two small circular rivets (D. 5 mm. L. 0.01 and 0.013 m.). For a discussion of the type see p. 97.

16. Arrow-head (FIG. 4, PLATE 15*a*). Badly corroded and broken. L. 0.09 m. Thick heavy blade. The tang has a rectangular section, and is much thinner than the blade.

Cf. *BSA* xlvii (1952) 271, fig. 12 (III (18) *d, e*); *T do A* 6, fig. 10*a, b*: Tomb Ia, assigned by Evans to the 'early part of L.M. III'.

17. Arrow-head (FIG. 4, PLATE 15*a*). Extremely fine condition. L. 0.085 m. Thin flat blade with wide shallow midrib. The tang is square in section and thicker than the blade. Nicks on the edges of the tang were presumably made to increase the purchase when the arrow was hafted.

18. Arrow-head (PLATE 15*a*). As **17**, but L. 0.086 m.

19. Arrow-head (FIG. 4, PLATE 15*a*). Very fine condition. L. 0.089 m. Thin flat blade without any perceptible midrib. The tang is square and thicker than the blade. Nicks on the edges of the tang, as in **17** and **18**.

Cf. *BSA* xlvii (1952) 271, fig. 12 (III (18) *a*); *Anatolian Studies* v (1955), 91, fig. 21, 10.

20. Arrow-head (FIG. 4, PLATE 15*a*). Much corroded. L. 0.091 m. Thin flat blade, split open by corrosion. The tang seems to be rectangular in section.

21. Fragments of copper or bronze wire (PLATE 16*a*). About half a cigarette-box full. Irregular shapes; circular

sections; blunt ends. Possibly connected with a helmet (see p. 96).

22. Six clips (FIG. 3, PLATE 16*b*). Evidently from the rim of some vessel or other object made of perishable material such as wood or leather. The clips consist of a cylinder ending in projecting plates which have a small perforation on each side. Both the diameter of the cylinder and the length of the projecting plates vary. Overall L. 0.026–0.037 m. W. *c.* 0.016 m. D. of cylinder *c.* 0.01–0.013 m.

Cf. Hazzidakis, *Tylissos à l'époque minoenne* (1921) 58, fig. 32 (Herakleion Mus. No. 1770): ten clips of the same size as ours, and one or two others which seem to be larger.

Nos. **23–25** no doubt come from the same object as **22** (see p. 86).

23. Handle (FIG. 3, PLATE 16*b*). Much corroded and broken. L. 0.062 m. W. 0.03 m. The thin ends are curled round to form loops.

Cf. *Gournia* pl. iv, 68; *AE* 1889, 156, pl. 8, 3: two from the Vapheio Tholos Tomb.

24. Hook (FIG. 3, PLATE 16*b*). Broken in three pieces and much corroded. Circular section, with blunt ends. L. as preserved 0.048 m. D. 3–4 mm.

25. Hook, as **24** (FIG. 3, PLATE 16*b*). Broken in two pieces and much corroded. The way in which the two pieces join is not certain.

M. S. F. HOOD

MYCENAE 1939-1955

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MYCENAE 1939-1955

PART I. PRELIMINARY REPORT ON THE EXCAVATIONS OF 1955

(PLATES 17-30)

INTRODUCTION

THE British excavations at Mycenae were resumed in 1955 with research grants from the American Philosophical Society and Bollingen Foundation and contributions from the Universities of Cambridge and Oxford, the British Academy, and the Seager Fund of the British School at Athens under whose aegis the excavations were conducted.

Work began on August 6th and ceased on September 7th. The next two days were spent in studying and photographing the objects found and in conveying them to the Nauplia Museum. There they were deposited in the room which Dr. Papademetriou has kindly placed at our disposal. We have taken the opportunity of equipping the room with wooden shelving to accommodate the vases and the other objects found and to store the wooden trays containing the boxes with the smaller finds.

The staff of the excavation in addition to my wife (who again took charge of the records) and myself consisted of Mr. Reynold Higgins of the British Museum, Miss Elizabeth Wace of Newnham College, Cambridge, Miss Linda Witherill of Radcliffe College and the Institute of Archaeology, London University, Mr. Charles Williams of Princeton University who was architect, and Mr. Piet de Jong who was draughtsman and executed a fine series of water-colour drawings. Mr. Robert McCabe of Princeton University was present for a week and we had many visitors including Mr. Barrett of Bollingen Foundation, Mr. Loukas Benachi of Alexandria, and Mr. J. H. Iliffe, Director of the Liverpool Museums. Mr. Monkman of the American Mission was a frequent and most helpful visitor. The British School at Athens lent us equipment including a theodolite, and Mr. Sinclair Hood the Director and Mr. Boardman the Assistant Director helped us in many ways. As usual Mrs. Rabnett the secretary smoothed all administrative and financial difficulties for us. The photography was successfully undertaken by Miss Wace and Miss Witherill. Orestes Dases was foreman and Arghyris Marines was as usual a skilful and most helpful technician.

The Greek Ministry of Education generously renewed the permit and helped us in many ways. We had the pleasure of a visit from Professor Marinatos, Head of the Archaeological Service, who gave much time to discussing various points with us. Dr. Papademetriou, Ephor of Argolis, was the representative of the Ministry and as always most courteously and readily gave us his help in all matters. He has generously allowed me to include in my account of the Prehistoric Cemetery a mention of his own discoveries in that area. We also had the friendly support of the Nomarch of Argolis and all the local Greek authorities. Our friends in the village including Aristoteles Tsitsekos, the emeritus guardian of antiquities, and the Dases family of the Fair Helen Inn made us most welcome.

The main areas where we planned to excavate were the following: (I) the Palace, where we wished to make supplementary investigations in the Porch of the Megaron and in the north-western section to clarify details of the plan; (II) the Prehistoric Cemetery outside the Lion Gate; (III) the House of Shields and the House of Sphinxes; (IV) the Ridge above the Treasury of Atreus between the Panagia Chapel and the prominent rock called Makry Lithari. The

further excavation of the Citadel House was postponed to a later season and nothing further was undertaken in the Cyclopean Terrace Building.¹

This report has been read by my wife and by our daughter and I am deeply indebted to them both for their constructive criticism which has much improved it. The responsibility for it, however, remains mine.

I. THE PALACE

In 1954 and 1955 the Anastelosis Department of the Greek Ministry of Education under the able direction of Professor Orlandos and Mr. Stikas undertook extensive works of preservation and restoration in the Palace. The first major work was the rebuilding of the fallen part of the foundations of the Megaron, which long ago had collapsed into the Chaos ravine. The plan of the Megaron is now completed and the surviving parts of the floor have been consolidated. The painted stucco floor at the north end of the Vestibule (56)² has been protected and it is hoped to provide similar protection for the hearth in the Megaron itself. At the south end of the Porch (55) when the surviving gypsum slabs of the pavement were again cleaned and consolidated some interesting details came to light. It would seem from the carved base found here in 1949 and removed to the Nauplia Museum and from fresh observations that there was at the front of the south end of the Porch an unusual installation probably intended for offerings of some kind. Apparently between the southern column and the southern anta there was a decorated base for a standing object, perhaps a large tripod, altar, or offering table, probably in bronze. By the side of this to the south there was a shallow oval basin cut in a gypsum slab, presumably for the reception of libations. The question needs careful study³ and it is to be hoped that Dr. Papademetriou will soon be able to publish the base in the Nauplia Museum.

At the top of the staircase at the entrance to the lobby (61) in front of the Throne Room (52) the Anastelosis Department has replaced the broken threshold of conglomerate which Tsountas' workmen had pushed down the slope below. The block is marked on Steffen's plan,⁴ *antiker Baustein*, at about this point. To accommodate it the north wall of the staircase was raised and strengthened. As a result the plan of the staircase and the approach to the Throne Room have been made much clearer.

It was originally suggested by Tsountas⁵ that this threshold, which was found at the south end of the wall separating the Antechamber (64) to the Throne Room from the Court (53), had belonged to a door leading from the Antechamber into the Court at the south end of that wall.⁶ Such a door would have duplicated the doorway with a red sandstone threshold at the northern end of the wall between the Antechamber and the Court. It was accordingly suggested that the red sandstone doorway was blocked up in alterations to the Palace. This I now think is unlikely and I prefer to place this threshold as the main threshold at the top of the stairs leading to the Throne Room through its Antechamber. To put two doorways in so short a length of wall between the Antechamber and the Court is not likely, and there are no signs now visible that the doorway with the red sandstone threshold was ever blocked up. The position therefore to which the Anastelosis Department has restored the threshold seems more likely and

¹ *BSA* xlix. 267 ff.

² The numbers are those of Dr. Holland's plan, *BSA* xxv, pl. 2; Wace, *Mycenae* pl. 4.

³ Dr. Papademetriou has already begun investigations south of this column (Orlandos, "Εργον 'Αρχ. 'Ετ. 1955, 74, figs. 70, 71). He has found close to the south side of the column a round base which he believes may have been an altar and near it fragments of circular altars or tables of

offering of painted stucco. To the east the floor is paved not with gypsum slabs but with plaster and this he suggests may have been the emplacement for a throne. See also *BCH* 1956, 261 f., figs. 1, 2.

⁴ Steffen, *Karten von Mykenai* pl. ii; *PAE* 1886, 63 f.; *BSA* xxv. 180.

⁵ *PAE* 1886, 63 f.

⁶ *BSA* xxv. 180.

is not too far off the position where Steffen noted it. We should in any case expect an imposing doorway at the top of the stairs leading to the Antechamber of the Throne Room. It is also hardly likely that the main entrance to the Court and so to the Megaron would have been in the extreme south-west corner of the Court.

We carefully examined the west end of the North Corridor in the area indicated on Dr. Holland's plan by the figures 10, 17, 18, 44 (FIG. 1). We could find no evidence to support the suggestion originally put forward that the North Corridor descended at its west end by a ramp to



FIG. 2. MYCENAE: PALACE, L.H. IIIC DEEP BOWL

the roadway resting on the West Terrace Wall.¹ Behind the north-west corner of the room north of the Western Portal (41) we found traces of a floor with a burnt deposit on it. In this deposit together with other potsherds there were the fragments of a deep bowl of L.H. IIIC style (FIG. 2). So if this burnt deposit marks the destruction of the Palace it would suggest that the date of the destruction of the Palace and consequently of the Citadel of Mycenae took place during the L.H. IIIC period. This corresponds with the similar date arrived at for the destruction of the Granary, the South House, and other buildings within the Acropolis.²

In this same area just to the north of Room 41 there were no indications to show how the North Corridor was approached from the roadway on the West Terrace. It is just possible that there might have been a staircase, and the wall west of the figure 17 at the west end of the North Corridor might have had some connexion with it. There is hardly room, however, for a staircase. For the present no decision can be reached. The question requires further detailed study. Tsountas' suggestion that the area 39 was probably a staircase linking the North and South Corridors seems correct.³

Investigation of the north-west area of the Palace by the figure 6 seems to show that this part of the Palace was supported by a terrace of fill the top of which was probably at about the same level as the floor of the Pithos Room (11). The ruins here have been much denuded and the area

¹ BSA xxv. 222.

² See my 'Last Days of Mycenae' in *The Aegean and the Near East: Studies presented to Hetty Goldman* (1957) 126 ff.

³ BSA xxv. 221; Wace, *Mycenae* 71.

was much disturbed when the heavy fill of the temple terrace was laid down. There seem, however, to be clear signs of rebuilding in Mycenaean times as indicated by the western walls of the Shrine (12). The fire which destroyed the Palace raged violently at this point, for the broken remains of the pithoi are distorted and partly vitrified.

Further examination of the Propylon (9) revealed in its eastern wall the traces of a pier of rubble, probably originally bound with wood, just in front of the line of the column base in the centre of the north front and the western anta. We can perhaps imagine that an architrave ran across the front of the Propylon on the top of the column which stood on the column base. Perhaps above this architrave ran the stone frieze carved with the Mycenaean triglyph pattern, part of which was found in this area.

Two other column bases lie displaced among the Hellenistic ruins in the southern part of the Propylon. There has been some discussion about the probable plan of the Propylon. One suggestion¹ is that the north front showed one column *in antis*. Behind this to the south there would have been a cross wall with a central door. Facing south from this along the roadway on the West Terrace Wall there would have been, it was suggested, another porch with two columns *in antis*. It is a little difficult, however, to imagine that a Mycenaean architect would have put two columns *in antis* in one porch and only one column in the other. The single column *in antis* on the north front is certain because the base is still *in situ*. The other columns are not in their original positions because the area has been so much disturbed by Hellenistic constructions, including the building of an olive press. So we may put forward another suggestion. According to this the Propylon would have been simply a roofed passage-way and had apparently no door that could be closed. The Propylon was about 7 metres long and 7 metres wide. On its north front facing the cobbled court (7) at this north-west angle of the Palace was one column *in antis* standing on the base which is still *in situ*. South of this and in the same line with the existing base along the north-south axis of the Propylon would have stood two more bases, one of which would have been *in antis* in the centre of the south front from which the roadway emerges on to the West Terrace and the other would have stood midway between the other two bases to the north and south. There would thus have been three columns in a straight line down the middle of the Propylon, which would have been a kind of roofed passage rather than a gateway or door. This suggestion seems the better and the plan can be compared with that of the Palace of Nestor at Pylos,² where there is on each front a porch with a single column *in antis*, but a cross wall with a central door between them.

The Propylon was apparently wider than the roadway to which it gave access to the south, for that seems to have been about 6 metres wide against the 7-metre width of the Propylon. The Anastelosis Department has restored and repaired the West Terrace Wall along its length from the Propylon to the Grand Staircase, except in one point. Where the West Terrace Wall was cut into in Hellenistic times immediately south of the oil press the Mycenaean wall of the West Terrace was destroyed and another wall built about 3 metres to the east, by the figure 44. The foundations of the Mycenaean West Terrace Wall, however, still exist and were noted by Dr. Holland, and it is unfortunate that the Anastelosis Department has missed the opportunity of restoring it and the roadway which provided the main entrance to the Palace, and has restored instead the Hellenistic wall.

2. THE PREHISTORIC CEMETERY

We had hoped this year to be able to continue our exploration of this area. Unfortunately we were obliged to postpone it again to another season. The southern part of the area is still occu-

¹ BSA xxv. 210 f.

² AJA lix (1955) 32, pls. 23, 24.

pied by the operations of the Anastelosis Department. The northern part is too close to the road whence the path leads up to the Lion Gate. We still hope, however, that it may be possible for us in the future to resume the exploration of the northern part of this area.

In 1954 the Anastelosis Department found a ruined grave close to the north-west corner of the tower or bastion which guards the approach to the Lion Gate.¹ This year Dr. Papademetriou found another grave about 8 metres west of the bastion and close to the Cyclopean wall. It is about 1.75 m. long, 0.84 m. wide, and 0.73 m. deep, and it has a north-south orientation. It contained fragments of a human skull and was probably a Middle Helladic grave. In late Mycenaean times it was cut into on its west side by another pit and the whole was used as a *bothros*. The grave had been completely robbed and in the *bothros* much pottery of the L.H. IIIB-C period was found.

About 50 metres farther west where the Cyclopean wall curves there is a pavement of rectangular tiles laid against the face of the Cyclopean wall. Schliemann's Grave Circle lies within the Cyclopean wall at this point. About 0.70 m. west of the tile pavement and about 2 metres from the face of the Cyclopean wall was a grave. Another grave lay somewhat farther west. Both were small shaft graves. One was about 0.75 m. long, 0.48 m. wide, and 0.40 m. deep. The other was of about the same size. Both had been disturbed, but at the bottom of the second lay a small L.H. II alabastron, 0.07 m. in diameter, with a fine ivy-leaf pattern on the body and concentric circles on the base.²

These graves can be compared with the graves found in 1939 somewhat farther to the north.³ Together with the ruined grave found by the Anastelosis Department at the north-west corner of the bastion and the large shaft grave found below the Granary in 1920⁴ these graves demonstrate the continuity of the two parts of the Prehistoric Cemetery, that within the Acropolis wall⁵ (of which Schliemann's Grave Circle is, so to speak, the kernel) and the part outside the wall to the north-west of the Lion Gate. This all helps to show that Tsountas was right in his belief that the Prehistoric Cemetery of which Schliemann's shaft graves were the royal part covered a large area both within and without the Cyclopean walls. These new graves prove that the Cyclopean wall was built through the middle of the Prehistoric Cemetery when it was disused.

3. THE HOUSE OF SHIELDS (PLATE 23a)

We continued our exploration of the House of Shields in order to clarify the plan of the building to the north and to try to ascertain for what purpose it had been intended, since it did not appear from its plan to have been a dwelling-house. We directed our main work to the clearing of the north wall of the East and West Rooms and of the Cyclopean wall which supported the terrace on the east. The plan (FIG. 3), which has been revised and extended in accordance with this year's work, shows the lines of the walls which we have traced. The whole of this northern area, especially on the western side, has suffered first from Hellenistic over-building and secondly from denudation and cultivation. It is thus not easy to disentangle the Mycenaean and the Hellenistic walls, especially since the latter often use Mycenaean materials and sometimes follow the lines of the Mycenaean buildings with slight divergences.

The House of Shields proper seems to have consisted of three main rooms, an East Room about 17.00 m. long and 5.50 m. wide, a West Room of approximately the same dimensions, and a North Room about 5.50 m. long and about 11.50 m. wide. The East and West Rooms lie side by side on an artificial terrace supported on the east and south by a heavy

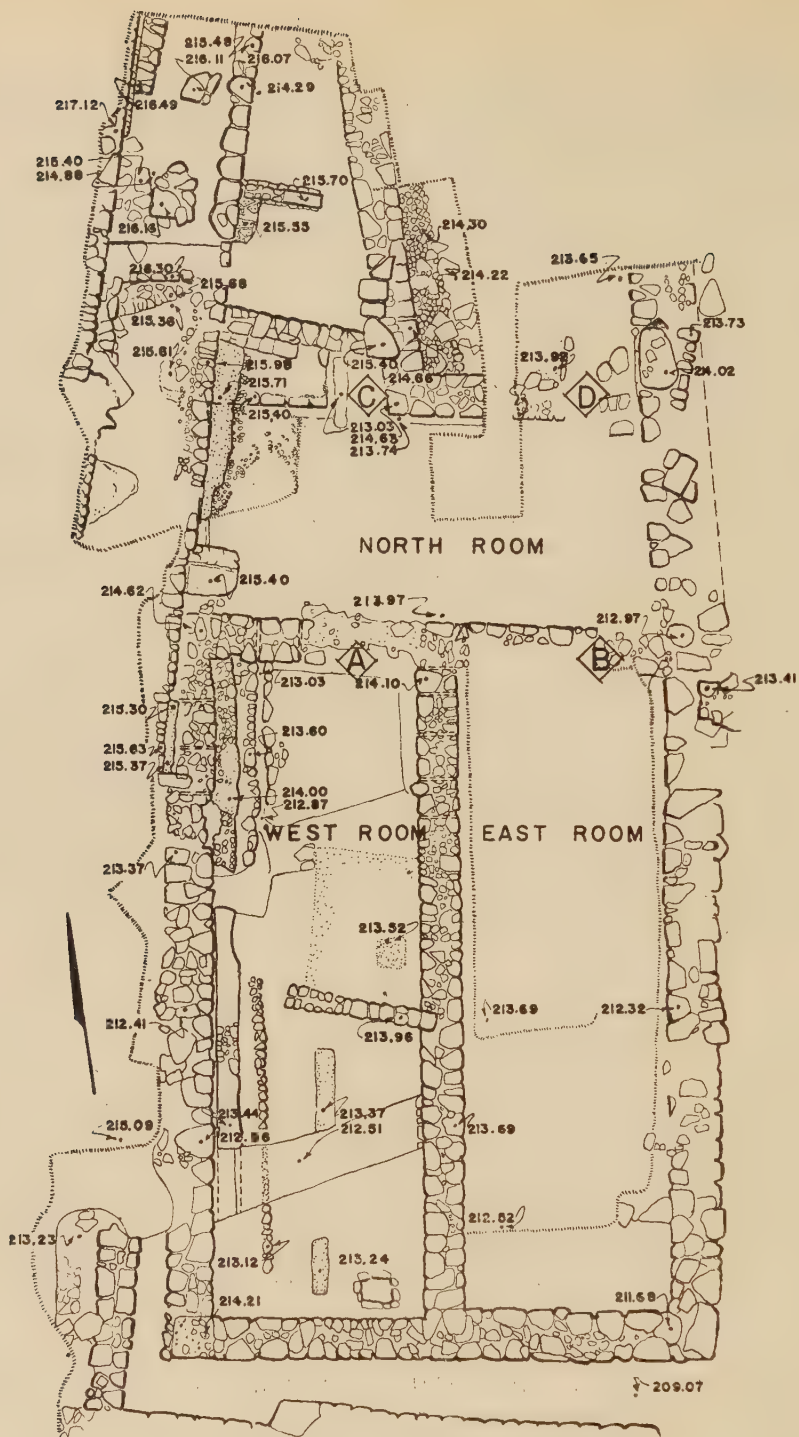
¹ BSA l. 177.

² Orlandos, 'Εργον Ἀρχ. Ἐτ. 1955, 74, fig. 72.

³ BSA xlv. 205 f., figs. 1, 2.

⁴ BSA xxv. 55 f., pl. 1; Wace, *Mycenae* 58, pl. 3.

⁵ BSA l. 190 f.



HOUSE OF SHIELDS

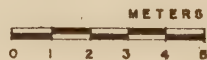


FIG. 3. MYCENAE: HOUSE OF SHIELDS

Cyclopean wall. The rock rises immediately outside the west wall of the West Room and also immediately outside the north wall of the two rooms, both the East and West. Thus apparently the purpose of the Cyclopean wall on the east and south was to create an extension of the rock terrace on which the North Room is built, so that there should be ground enough for the three-roomed building which was planned.

The East and West Rooms have no obvious entrances from the east, south, or west and therefore we must conclude that they were entered from the north. In the north wall of the West Room there is a break at its east end, A on the plan, and in the north wall of the East Room there seems again to be a break at its east end, B on the plan. When we look at what is preserved of the north wall of the North Room we observe that there is a break in it, C on the plan, placed almost symmetrically with the break A at the east end of the north wall of the West Room. Similarly there seems to be a break at the east end, D on the plan, of the north wall of the North Room corresponding to the break B in the north wall of the East Room at its east end. It would have been a three-roomed house with two long rooms side by side, but apparently not communicating with one another. Across their northern ends lay another room which gave access to the East and West Rooms by doors (A, B) set at the east ends of their north walls. In the north wall of the North Room there were two entrances (C, D) in positions corresponding to those of the entrances in the north walls of the East and West Rooms. These suggestions will have to be tested by further examination of the ruins and by further excavation of the area immediately to the north of the North Room. The west wall of the North Room, in spite of the Hellenistic disturbance, seems to continue the line of the much-damaged west wall of the West Room. Also along the inside of the west wall of the North Room there seems to have been a continuation of the clay bench which runs along the base of the west wall of the West Room on its inside.

Underneath the west side of the assumed west entrance in the north wall of the North Room we found a small grave cut in the rock and running north and south. It was about 1.20 m. long, 0.50 m. wide, and 0.90 m. deep. It had been completely robbed and contained nothing but a few indeterminate sherds. Presumably it was found when the North Room was built. It may have been a Middle Helladic grave, but we are without any real clue to its date except that it must antedate L.H. III.

In the western part of the North Room a shallow deposit of black earth and carbonized matter similar to that which was found in the West Room lay over the rock floor. In this layer were found a miniature figure-of-eight shield in ivory like those from the West Room, and some other unrecognizable fragments of ivory. A considerable amount of much damaged faience was also found here. One piece of a vase (PLATE 17*a, b*) shows a man, probably a warrior, wearing a conical cap or helmet and brandishing his right arm. The scene is bordered at the top with a band of a lozenge pattern. Round the conical cap there are horizontal lines, which may be perhaps a shorthand representation of the rows of boar's tusks which protected a boar's-tusk helmet.¹ Or they may be simply bands of metal round a bronze helmet.

The warrior and his attitude resemble those of another warrior on a fragment of a faience vase found in 1954 in the West Room (PLATE 17*c*). This also shows a warrior wearing a similar helmet and in profile to the right. He brandishes over his head something with his right arm, a spear or perhaps a sword. This fragment has a rather heavy rolled lip decorated with a pattern of alternating triangles. It is probably a fragment from a conical rhyton. A faience rhyton of this shape is known from Egypt.² Both pieces are in rather thick faience. The first piece is covered

¹ BSA xlix. 236 f., pl. 35.

² Evans, *PM* ii. (2), pl. xxiv. 20; Bossert, *Art of Ancient Crete* fig. 569. The shape also occurs among the gifts in the

frescoes of the tomb of Menkheperasenb, Evans, *op. cit.* ii (2), pl. xxviii.

with a dull greenish glaze and the second with a glaze of a pale brownish tone. In both pieces the decoration is rendered by simple thin black lines slightly sunken.

In the West Room in 1953 and in the North Room in 1955 were found several fragments of stemmed bowls of faience. The fragments of one from the West Room have already been illustrated,¹ but we are now able to show a restored drawing of it from the skilled hand of Mr. Piet de Jong (PLATE 18), and also a restored drawing of a similar bowl from the North Room (PLATE 19). The West Room bowl has on the body a simple gadroon pattern with above it a lozenge band separated from the body pattern by an empty zone. On the rim, which is slightly rolled, there is again a lozenge band. It had one simple rolled handle with a central groove, attached to the lip (above which it rises slightly) and ending about half-way down the body.

The 1955 bowl from the North Room has a wide solid band at the top of the stem and from this rises round the body a frieze of lotus flowers of three petals flanked by two leaves. Above this there is an empty zone and above that a pattern of rays running round the bowl just below the lip, which overhangs slightly. The handle seems to have resembled that of the West Room example. Both these bowls are of thickish faience covered with a pale bluish-green glaze which tends in places to a brownish tone. Both bowls, like the warrior fragments, have suffered severely from the fire which destroyed the house, and are very friable. The glaze also has developed a tendency to flake off. All these faience vases were made in moulds in separate pieces which were subsequently put together before the glazing. The feet and handles show clear signs of separate attachment. The sunken lines of the patterns seem also to have been made in the moulding process.

Another important faience vase is an elongated ovoid rhyton of a shape which seems almost like a cross between the conical rhyton and the true ovoid shape.² This vase (PLATE 20) is decorated with parallel bands of spirals running obliquely down the vase from the neck. The spiral bands are bordered by cable designs. There is an empty zone between each pair of spiral belts. There is a broad splaying rim at the top of the short neck and on one side a plain ring handle is attached underneath the rim. At the top of the body at the base of the neck there is a raised band decorated with incised lines in pairs. The ornamentation on this rhyton is in black and is slightly sunken. The glaze is a pale Cambridge blue. This vase also was moulded in separate pieces which were set together before the glazing. The neck and handle were made separately and attached, and the body was moulded in two pieces, for there is a straight horizontal joint round the middle of the body. The sunken lines for the decoration were also made during the moulding process. Most of the upper part of the vase exists (FIG. 4) and has been rejoined, but of the lower part of the body we have only one fragment. Thus we do not know how the pattern of the spiral bands ended at the rounded lower end, and thus the restored drawing has been left incomplete in this respect (PLATE 20).

These faience vases form one of the two main groups of faience vessels which we have found in this house. They are what might be termed monochrome faience. The vases are covered with a monochrome glaze and the designs are in black, which is usually set in slightly sunken lines moulded when the vase was made.

The other group of faience is polychrome and is represented by far fewer pieces, but the fragments are in better condition and seem to have resisted the effects of fire much better. In this group the vases are thinner and apparently of finer fabric and are covered with a yellowish or white glaze with flat designs in several colours, red, blue, yellow, and black. One piece (PLATE 21*a*) is a flat ribbon handle decorated with a lozenge band in blue, red, and yellow on a yellow ground. Blue is the dominant colour in the lozenge band, for it occurs twice as often as any

¹ *BSA* xlix. pl. 36*a*.

² Cf. *PM* ii (1) 255, fig. 129, 15.

other colour. The pattern is framed along each side with a barred band of blue. Some other pieces are from a vase with a design of griffins and lions tentatively restored in the drawing (PLATE 21*b*). It shows a design of griffins in blue and lions in yellow outlined with black upon a white or yellow ground. In style and design it is unusual, although both lions and griffins are common in the Mycenaean repertory.



FIG. 4. MYCENAE: HOUSE OF SHIELDS, FAIENCE RHYTON

The source of all this faience is unknown. It bears no resemblance to the Knossian faience so familiar from the objects found in the Palace of Minos and in the Temple Repositories.¹ We should not, however, forget that the Knossos faience is much older, dating from M.M. III, whereas the Mycenae faience is probably of the L.H. IIIB period. The faience disks from Schliemann's Shaft Grave² IV are probably Knossian and so also is a small vase from Shaft Grave A of the Middle Helladic Grave Circle. There is some Egyptian faience from Mycenae and from the tholos tomb at the Argive Heraeum,³ but it has little likeness to this faience from the House of Shields. We might perhaps suggest that it was made at Mycenae itself, but faience is extremely rare in the chamber tombs of Mycenae and the few pieces found are quite different. The lotus pattern suggests an Eastern source, but in spite of the pattern the faience, as a whole, does not

¹ *PM* i. 486 ff.

² *PM* i. 483, fig. 346; Karo, *Schachtgräber* 243 f.

³ See Pendlebury, *Aegyptiaca* nos. 85-87, 91, 103.

seem to be Egyptian. It may come from Cyprus, Syria, or some other Levantine region. It ought to be possible to recognize the style of the griffin and lion fragment. The subject deserves and requires further detailed study, and a comparison of samples of the faience found in the different regions of the Eastern Mediterranean is much to be desired. Perhaps it may be possible to undertake an analysis of the composition and of the glaze of the faience. This might throw some light on its origin. It is extremely unfortunate that the destruction of this house by fire and the subsequent long burial of the fragments of faience have left them in such bad condition. It is curious, however, that the polychrome specimens have survived in better condition than the monochrome.

Fragments of two or three stone vases were found in the same black deposit in the western part of the North Room. They were of steatite and of serpentine, but none was complete. They with the ivory and the faience show that the deposit was of the same general character as that in the West Room of the building.

In 1954 we found in the West Room the fragments of an ovoid rhyton in steatite, which was illustrated from a photograph in the last report.¹ It is now illustrated here in PLATE 22 from a restored water-colour drawing by Mr. Piet de Jong. In the outlet at the bottom we found a small fragment of green corroded metal. This was probably a piece of silver alloyed with copper or bronze as so often in Mycenaean metalwork. There are holes pierced near the upper edge of the body obviously for the attachment of a mouthpiece. In the drawing therefore a mouthpiece has been restored, and its shape is based on the mouthpieces of ovoid clay rhytons and of the faience mouthpiece of the ostrich-egg rhyton from the Fourth Shaft Grave.² The decoration of the body consists of a series of three bands of shallow incised herring-bone ornament separated by deep grooves. The central herring-bone band was further decorated with a series of shallow drill holes, which were presumably intended originally for the insertion of inlay either in stone or in metal. The inlay has now all fallen out. This rhyton is noticeable for its elegant shape and fine workmanship. It is an extremely good example of the ovoid rhyton in stone and confirms the idea that stone vases were sometimes provided with lids or mouthpieces of metal.³ Further, we have here again in an L.H. IIIB context a stone vase decorated with inlays. This confirms the view already put forward that stone vases with inlays should not be used as evidence for a Middle Minoan or Middle Helladic date.⁴

As already stated, the building was constructed in the usual Mycenaean manner. The walls are about a metre thick and are founded on the rock. They are of undressed stone built in a modified Cyclopean style and packed with clay. Set into the stone base was a timber framework which extended upwards to bind and strengthen the superstructure of crude brick. Whether there was more than one story above cannot now be ascertained, but there seems to have been at least one story above the ground floor. The bulk of the burnt deposit in the West Room and at the west end of the North Room seems to have fallen from above when the building collapsed on being burnt. Had the various objects (stone vases, ivories, woodwork, faience) been on the floor of the West Room when the building was wrecked by fire, we should have expected to find the fragments together. As it was they were scattered as though the objects to which they belonged had broken when they fell, so that the pieces were separated in all directions. It is possible that the ruins in later times not long after the catastrophe may have been searched for anything of value. There seems to have been a stout pillar of rubble and clay reinforced with timber at the south-west corner of the building. The floor of the West Room was of clay, and the bench which ran along inside the base of the west wall of the West Room was of clay or crude

¹ BSA I. 183, fig. 4.

² PM II (1) 225, fig. 129, 5-10; Karo, *Schachtgräber* pls. cxli, cxlii.

³ BSA xlix. 237.

⁴ BSA xlix. 238.

brick and was about 0.30 to 0.40 m. high. It had disintegrated too much for certainty. Nothing, however, has yet been found in the building to give any clue as to what its purpose was. There is no sign of any staircase leading to the upper floor, and in plan it is totally different from its neighbours to the south, the House of the Oil Merchant and the House of Sphinxes, which were houses with basements. It also has no likeness to any of the houses within the Citadel, such as Tsountas' House and the House of Columns. When further exploration can be undertaken to the north of this building and the excavated area can be studied in greater detail, then the Hellenistic over-building and other disturbance can be more accurately estimated. Then we may perhaps be able to make some reasonable suggestion about the original purpose of this elaborate and richly equipped building.

4. THE HOUSE OF SPHINXES (FIG. 5)

We made further examination of this house, especially on the west side and on the south, in attempts to discover its extent and also to see whether any other house adjoined it to the south. On the west side in Room 2 we made a small cut into the high bank westwards and found the south-west angle of the room. This gives us an idea of the size of the room as a whole.

In Room 6 we cleared the two Hellenistic cesspits down to a depth of 5 metres each. In the northern cesspit we found many animal bones in the upper part and below that many stones and among them a little Hellenistic pottery. We cleared the shaft down to a depth of 5 metres, when mud began to appear. At this depth little was found. In the south cesspit there was a good deal of early Hellenistic pottery. It was mostly plain black glazed ware which might well be of Attic origin and when decorated has simple designs either moulded or incised. In the upper part of the pit there were also many fragments of Hellenistic roof tiles. About 3.50 m. from the top, part of a small Doric pilaster capital in poros was found. At a depth of about 5.25 m. little Hellenistic pottery was found and the excavation was stopped. The Hellenistic pottery found is on the whole of good quality and depends to a considerable extent on metallic forms. We hope that it will be possible to publish a short account of it later. In the upper Hellenistic level we found half a Doric pilaster capital in terracotta which had probably belonged to the Hellenistic house built over the ruins of the Mycenaean House of Sphinxes. This capital seems to have been that of an engaged semi-column. To the Hellenistic period also belongs a cement-lined cistern found in a trial made to the south to see whether there were any other Mycenaean houses in that direction.

The western part of Room 6 was dug out in the hope that more inscribed clay tablets might be found. None, however, was discovered. The west wall was cleared and it was found that the lower part of the wall was cut out of the rock up to a height of 0.60 m. Above that it is built with clay and rubble in the usual Mycenaean manner. From the west wall of Room 6 and that of Room 2 it appears that the west wall of the house was not parallel with the central corridor.

At the south end of the central corridor (PLATE 23*b*) we excavated a further section to ascertain the full extent of the house. It appears that considerable alterations were made to this part of the house. Since there is a foundation trench cut in the rock between the south-east corner of Room 8 and the south end of the east wall of the corridor, it is possible that this was originally the entrance to the basement and that south of this and east of Room 10 there was a small open court. The oblique east wall in the area east of the corridor possibly then did not exist, and the whole space with the drain was perhaps a stable approached from the suggested forecourt by an entrance to the east of the south end of the east wall of the corridor, where there is another rock-cut foundation trench possibly of the same period. At a later date the forecourt seems to

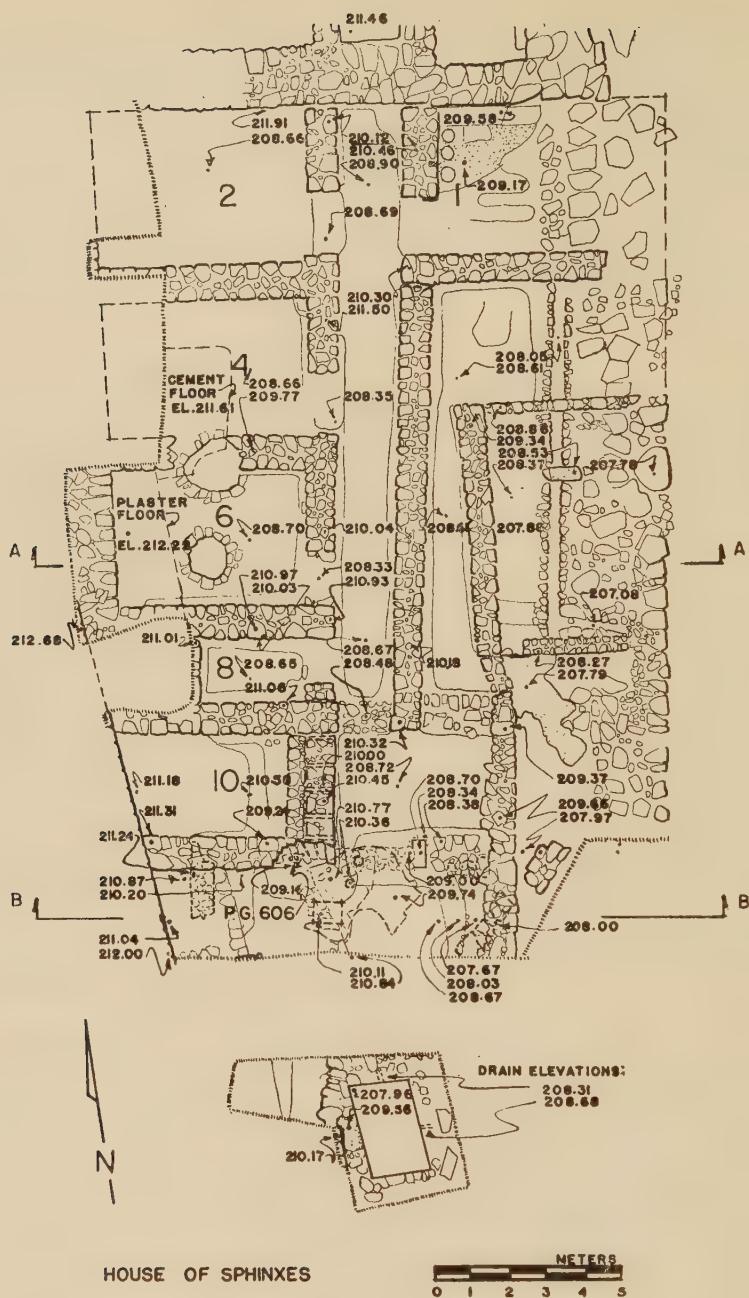


FIG. 5. MYCENAE: HOUSE OF SPHINXES

have been enclosed as a lobby. The wall on its east side may have already existed. Its south side was divided in two by a rectangular poros block in a line with the south wall of Room 10. The space between this block and the south-east corner of Room 10 was apparently a door. The space between the poros block and the eastern wall was then built up. Later still another change took place. This last wall was pulled down, and an entrance was possibly made here and the suggested door between the block and the south-east corner of Room 10 possibly built up instead. It may have been found that an entrance to the basement here was inconveniently close to the bottom of the outside staircase to the upper floor. At the same time changes apparently took place in the stable area which are not yet clear and may perhaps be elucidated by further excavation in the south-east corner.

The east wall of Room 10 is thicker than the average of the other walls of the house. It stands 1.40 m. above the rock. The stone-built parts of the walls of other rooms, as for instance the south wall of Room 6, are higher. In the existing stone lower part of the south wall of Room 6 there are clear traces of a wooden beam which was the lowest timber beam in the wooden framework which reinforced the unbaked brick superstructure. On the top of the existing part of the east wall of Room 10 on its east side there are still clearly visible the chases where the ends of transverse beams had rested. These transverse beams probably served to carry the roof over the lobby to the east. Their height from the rock floor gives us the probable height of the basement, 1.40 m. This compares with 1.50 m., the height apparently of the basement of the South House. The east basement of the Granary and the basement of the House of the Oil Merchant seem to have been somewhat higher, perhaps as much as 2 metres. In the House of Columns the height of the basement was probably about the same.

In Room 10 the rock rises and its top is about 2 metres above the level of the rock floors of Rooms 2, 4, 6, and 8 and also of the lobby. To the south of Room 10, on the west of the entrance to the lobby and basement, the rock rises in a series of rough shelves. It has therefore been conjectured that there was an outside staircase for communication between the basement and the story above. It would have ascended directly on the left of the entrance to the lobby by a wooden staircase built on the shelving rock and at the top have turned at right angles to the north to come out on a landing above the rock in Room 10. This would explain many of the peculiarities of the plan of this house and also the fact that in the basement itself there is no suitable place for an internal staircase to lead up to the floor above.

At the south-east angle of Room 10 on the outside there was a great mass of disintegrated crude brick, burnt hard by the fire which destroyed the house. This covered the lower part of the shelving rock and most of the western part of the entrance on the outside. In it we found a curious cavity of rectangular shape. It was 0.70 m. long, 0.60 m. wide, and 0.40 m. deep. It was probably the cavity left in the mass of decomposed brick by the decay of a small chest or box made of wood or some other perishable material. In it we found fragments of bronze and silver pins and rings. It seems to have rested on the shelving rock. It perhaps represents the remains of a box which once contained valuables and was looted when the house was set on fire, and left lying on the stairs, where it was overwhelmed by a mass of crude brick fallen from the floor above.

An interesting object was found beneath this mass of decomposed brick. It is a round, shallow, spouted mortar (0.08 m. high, 0.21 m. in diameter) cut out of a hard compact stone (PLATE 24a). The base, which is 0.13 m. in diameter, is flattened. Near it was a pestle (0.13 m. long) made of the same stone. It should be noted that querns and millstones and grinders in Greece from the Neolithic Age onwards are nearly always made of a vesicular lava or trachyte, which is suitable for grinding hard grains like wheat or barley. The compact stone of this mortar is better adapted

to crushing, bruising, or pounding seeds such as those found in Room 8, grass, peas, lentils, vetches, or those mentioned in seven of the tablets found in Room 6, celery, fennel, sesame, coriander, cumin, &c. The same difference in material can be observed today in Greece between millstones used for wheat and the mortars used for domestic purposes such as grinding coffee. No querns or millstones have been found in the house.

In this area (the south-western part of the house) in the upper levels we found several fragments of stone vases both in 1954 and 1955. It would thus seem that there had been in one of the upper rooms of the house when it was burnt a group of stone vases (PLATE 24*b*). Unluckily none of them is complete, but in fabric in general they resemble those from the House of Shields. An exceptional piece is part of the lip and body of a fine bowl in diorite. Since this stone does not occur in Greece we can assume that this is a fragment of a bowl imported from Egypt. It thus serves as a parallel for the baggy jar of alabaster¹ of which a large fragment was found in the House of Shields in 1953. These two stone vases are further evidence of Mycenaean contacts with Egypt during the XVIIIth and XIXth Dynasties, although the diorite bowl is probably of much earlier date.

We hope that it will be possible to carry out even more detailed examination of this interesting house and solve some of the problems arising from its plan and from the objects found in it.

On the outside of the south-east corner of Room 10 we found, dug down deep into the rubble masonry, a small cist grave of the Protogeometric Period. This is grave No. P.G. 606.

On the west of the modern high road we made several tests to see whether the houses extended in that direction up the hill. Directly west of the road opposite Room 6 of the House of Sphinxes the grave of a child was found belonging to the early Geometric Period. This Grave G. 605 and Grave P.G. 606 are published by Mr. Desborough below in Part III.

All the other tests in this region as far up the hill as the level of the modern aqueduct produced nothing of importance. Except where the soil is held up by modern terrace walls, the rock is not far below the surface. A few inorganic walls were found here and there but no building. The dates of the walls are not easy to determine. Some may be Mycenaean and others seem definitely Hellenistic. There was no stratification which could be observed, because the whole area has been so much disturbed and denuded. The pottery was mostly Mycenaean (L.H. III) and Hellenistic.

5. THE TREASURY OF ATREUS

In 1939 in our re-examination of the Treasury of Atreus we made tests behind the dromos walls both to the north and to the south.² In the course of this work we discovered that a thick rubble wall runs up the hill obliquely from the sides of the dromos. This wall is over a metre thick and is preserved to a height of about 1.50 m. It is built of stones of no great size, well packed with clay. We traced it on the north to a distance of nearly 40 metres away from the dromos wall and on the south for a distance of about 25 metres. Below and in front of this wall we found a number of worked blocks of poros which lay in disorder looking as though they had been tumbled over the edge of the rubble wall.³ We then concluded that these poros blocks had belonged to an earlier building which had been destroyed when the Treasury of Atreus was built. The rubble wall, we assumed, had been constructed to support the base of the mound of earth piled over the dome of the tomb to weight it. Underneath the earth was a layer of the yellow-green clay which is found at Plesia and Longaki and was a favourite building material of the Mycenaeans. They used it as mortar and also to waterproof buildings. As mortar it was used in the side walls of the dromos of the Tomb of Aegisthus⁴ and as a waterproof material it

¹ BSA xlix. 237.

² Wace, *Mycenae* 124 f., pls. 8, 9.

³ Wace, *op. cit.* 129, pl. 45*a*.

⁴ BSA xxv. 297.

was used in the backing of the dromos walls of the Treasury of Atreus and also to cover the mound of earth over the dome of the Tomb of Aegisthus.¹ The poros blocks (PLATE 25*a, b*) are of two types. Some of them are in shape roughly triangular and many have fishtail clamp holes at the back of the upper surface. Others are triangular in elevation and long and wide. They have the appearance of coping blocks. Blocks of these two types are to be observed in connexion with the wall which closed the dromos of the tomb at its entrance on the east and in the side walls which run north and south beyond the ends of the side walls of the dromos. We then thought that these poros blocks in the closing wall of the dromos entrance had also been taken from the presumed earlier building and reused for closing the dromos entrance.

This year in connexion with our exploratory trenches on the top of the ridge to the west of the dome of the tomb we made a test almost due west of the top of the dome and about 25 metres away from it. It should be noted that the peak of the mound of earth which now crowns the dome on the outside is not exactly above the top of the dome, but a short distance to the west of it. Behind the dome of the Treasury of Atreus on the west the earth on the ridge has been held up by the tomb and there has been considerably less denudation. At a depth of slightly over 2 metres our trial found a rubble wall at least 1 metre thick packed with yellowish-green clay. This wall is faced with poros blocks triangular in plan and with fishtail clamps at the back (PLATE 25*c*). They are similar in style and size to those we found in 1939 in front of the rubble walls on either side of the dromos. Lying in front of the wall to the west was a large block of worked poros. We made another test to the south to see whether the poros-rubble wall, which curves slightly, continued in that direction. We found here again another section of the same wall (PLATE 25*d*), built of rubble and packed with clay and faced with triangular poros blocks with fishtail clamp sockets. We began another trial yet farther south. A first attempt was too high up on the slope and met the layer of yellow-green clay with which the dome is covered. Slightly farther down we found a mass of rubble which may be a continuation of the rubble wall. In the soil round we found a number of chips of poros similar to those found in our first two tests which had revealed the poros-rubble wall. On the south side at this point we found quantities of potsherds, all much encrusted and few of them painted. Those identifiable, however, all seem to belong to the earlier stage of L.H. III.

When we plotted on the plan (FIG. 7) the poros-faced rubble wall we observed that it, like the rubble wall found north and south of the dromos in 1939, is about 25 metres from the peak of the dome of the tomb. We suggest therefore that the poros blocks found in 1939 had originally faced the rubble wall and had been torn out by plunderers in search of building material or perhaps buried treasure. The plan (FIG. 7) shows the position of the parts of the rubble wall found in 1939 and also those found this year. The poros blocks therefore, we decide, do not come from a building destroyed when the Treasury of Atreus was built, but formed the facing of a rubble revetment which encircled the base of the mound of earth heaped over the dome to prevent excessive denudation. Since the wall was not only faced with poros but also had a coping of poros it must have provided a good architectural finish to the outside of the tomb. Further examination is necessary so that we can see how the line of the poros-rubble wall ran round the base of the mound of earth and how it ended against the backs of the dromos walls.

These discoveries show that the wall round the base of the mound over the Treasury of Atreus resembled that recently discovered on the east side of the Tomb of Clytemnestra.² It is of course like that which Pausanias³ describes as round the Tomb of Aepytus, which had γῆς χῶμα οὐ μέγα λίθου κρητῖδι ἐν κύκλῳ περιεχόμενον. We can well describe the poros-rubble wall of

¹ BSA 1. 207 f.

² BSA xlviii. 5 f., pl. 10*a*; 1. 209 ff.

³ viii. 16, 3.

the Treasury of Atreus as a κρηπίς λίθου. Also, just as the poros wall at the Tomb of Clytemnestra is similar in style to the wall of poros which blocked the entrance to its dromos at the south end, so the blocking wall across the entrance, the east end, of the dromos of the Treasury of Atreus was built in a similar manner. We thus obtain fresh light on the building methods of the Mycenaean. The system of making the facing-blocks of poros roughly triangular in plan is usual at

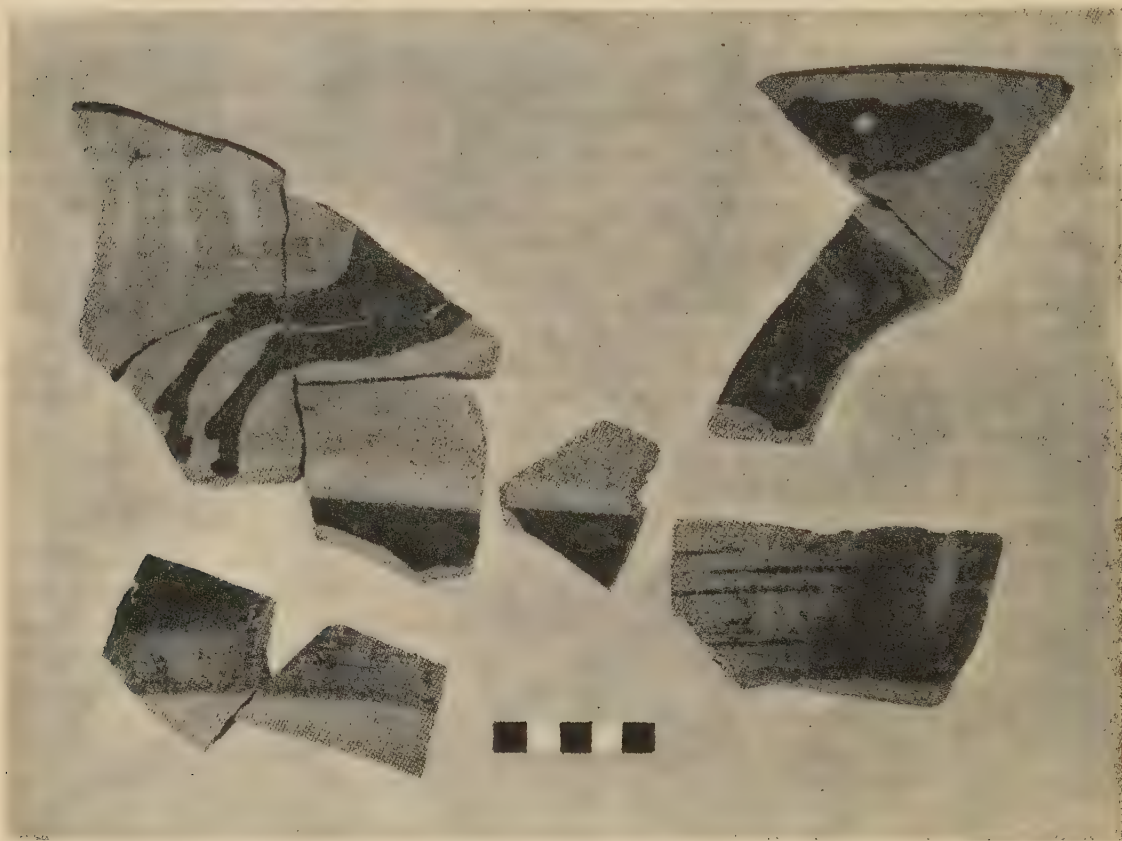


FIG. 6. MYCENAE: ATREUS RIDGE, HORSE VASE

Mycenae, as for instance in the poros wall of the Tomb of Clytemnestra. It was also in use at Pylos in the Palace of Nestor.¹

As we have already observed, it would seem that it was the rule that the peak of the dome of a tholos tomb should be covered with a mound of earth surrounded at its base with a low retaining wall. How high the retaining wall of the Treasury of Atreus was we cannot yet tell, and we do not know how the triangular coping blocks were fitted on the top of the wall, especially since the back of the wall would presumably have been against the sloping bank of earth behind. Or are we to assume that the low retaining wall stood with its top courses slightly in front of the sloping mound of earth? In view of the triangular coping blocks found by the dromos entrance the blocking wall of the dromos also perhaps had a coping course. One other point remains to be determined, and that is the purpose and the method of fastening the wooden clamps which

¹ *AJA* lix (1955) 36.

presumably were set in the fishtail sockets. Their purpose was no doubt to attach the poros blocks securely to the rubble wall.

It should be noted that in 1939 two of the poros blocks found then bear signs resembling those of the Mycenaean Linear B Script.¹ They are not, however, signs of the script and must be regarded as masons' marks. The base of the mound of earth over the dome must be more thoroughly examined so that these and similar details can be elucidated. Still, although further work remains to be done, our work this summer has been satisfactory in that it seems to have solved the problem aroused by the poros blocks on their discovery in 1939.

In front of the poros-rubble wall, that is to the west of it, in our first trial trench and not far below the surface we found several fragments of a large Mycenaean vase with a spirited representation of a horse and probably of L.H. IIIA style (FIG. 6, PLATE 26). The vase was probably of a krater-like shape. On one side there was a galloping horse most vigorously drawn in brown-black glaze paint picked out here and there with white. The style and vivid rendering of the galloping animal are unusual in Mycenaean art. Figure and animal subjects are common both in fresco wall-paintings and in vase decoration, but there is no other so far known which can compare with this, fragmentary though it is, for freshness of style and keen observation. It stands out as a Mycenaean masterpiece. The white marks behind the horse are apparently not signs of the Linear B Script. It is to be hoped that further excavation in this area may result in the discovery of more pieces of this important vase.

6. THE HOUSE OF LEAD

In 1939 in our re-examination of the details of the construction of the Treasury of Atreus we dug behind the walls of the dromos both on the north and on the south at points about 15 metres from the façade.² We discovered there a deep rock cleft which had been cut through by the dromos of the tomb. In the rock cleft was a great quantity of painted pottery, fresco fragments, animal bones, and other debris, which all seemed to be household refuse. Since it was unlikely that such refuse would have been carried uphill we deduced that it must have been thrown down the hill from houses on the ridge above. We then made some trials on the ridge and found traces of what we believed to be houses. We planned to make further exploration on the ridge, but were not able to carry out this plan until 1955.

We made a survey (FIG. 7) of the backbone of the ridge from the Chapel of the Panagia southwards as far as the projecting rock called Makry Lithari. In this region we made trial excavations at suitable spots. In particular we wished to test an area at the south end held up on the south, east, and west by a low Cyclopean terrace wall. This is marked clearly on Steffen's excellent map³ of the environs of Mycenae, and he calls it *Grundmauern eines kyklopischen Festungs Thurmes*. The idea then prevalent was that the walls of Mycenae had extended along the Atreus or Panagia Ridge as far as the Makry Lithari. There is no evidence to support this theory. No fortification walls are visible along the ridge except the Hellenistic wall of the lower town at the northern end. Further, a moment's reflection will show that a long narrow area like this would have been untenable and dangerous from a military point of view. The so-called fortification foundations of Steffen are in reality the supporting walls of a terrace on which there once stood in Mycenaean days a large and important house. We had suspected the existence of a house here in 1939, and our work this year has amply confirmed our belief. Almost everywhere where we made tests on the southern end of the ridge, south that is of the Panagia Chapel, we found traces of houses and of human occupation. It is also to be noted that round the lower part of the

¹ Bennett, *Proc. Am. Philos. Soc.* vol. 97 (1953) 437 (218, 219).

² Wace, *Mycenae* 124 f.

³ *Karten von Mykenai* pl. i.

same ridge there are many chamber tombs on the east, south, and west. To this cemetery belong the tombs of what we called the Third Kilometre Cemetery and the important chamber tombs excavated by Tsountas,¹ and perhaps we might even include in this cemetery the Panagia Tomb and the Treasury of Atreus itself. The houses and the tombs go together. The inhabitants of the houses, when they no longer needed them, moved down the ridge to their long homes in the family chamber tombs at the base of the ridge. This idea of the inhabitation of Mycenae outside the citadel was long ago visualized by Tsountas. He observed that on the hills where remains of houses were visible there were tombs in the slopes below, as for instance on the Kalkani hill.² His observations have been completely confirmed by our excavations this year on the Atreus Ridge. The pottery from Tomb 505³ of the Third Kilometre Cemetery can well be compared with some of the pottery found by us in the lower levels of the House of Lead on the Atreus Ridge.

The terrace on which this house stands measures about 20 by 30 metres. It is built on the sloping rock and the backbone of the ridge crops up in the middle. The terrace wall (PLATE 27*a*), which is best preserved on the west side, is now not more than two or three courses high, for there has naturally been much denudation. At its highest point the wall including the footing is about 2 metres high. We must imagine that it was originally considerably higher and we must also imagine as standing upon it a large and important house, the residence of a wealthy noble or of a rich merchant. The house would have possessed a basement and at least one story above that. We have today part of the basement. The rest has gone. Below the basement floors and in the earth packing behind the terrace walls there is a quantity of debris of earlier date. Examination of this shows that the ridge was first occupied at the beginning of the Late Helladic Period. There are so far no traces of Middle Helladic occupation.

The area is limited at its north end by the remains of a wall which is now not more than one course high and measures in actual height about half a metre. To the south of this are the remains of a cross-wall running east and west and directly to the south of this a test revealed the remains of a storeroom with a floor of beaten earth about 1·30 m. below the surviving upper stones of the cross-wall. In the storeroom we found the remains of about ten vases all of a domestic or storage kind (PLATE 28*a*). There are as yet no fragments of large pithoi or big stirrup jars. The biggest vase (PLATE 29*b*) is a large piriform vessel 0·65 m. high, obviously intended for storage purposes. It is decorated with a solid band of reddish-brown paint round the neck and the top of the shoulder. On the body there are three horizontal lines and between the handles there is an irregular wavy line. Another vase is a well-designed amphora about 0·40 m. high with a decoration of simple broad bands around the body (PLATE 29*c*). There were also in the storeroom six other vases which have not yet been restored but are of plain unadorned domestic ware. They recall the plain domestic or kitchen ware from Zygouries⁴ and elsewhere. There is a stirrup jar (PLATE 29*d*) which was obviously in the house when it was destroyed by fire because it is much broken and is discoloured and generally grey in tone. There is a flower pattern on the shoulder and round the body is a series of belts of short vertical wavy lines bordered by parallel bands. The neck, spout, and handle are rather tall and the vase seems to belong to the latest stage of L.H. IIIB. The presence of this vase dates the destruction of the house therefore to the end of L.H. IIIB, the time when, as we have seen, the other houses outside the citadel were destroyed. It is interesting to note that at that period, although the citadel of Mycenae did not suffer, all the inhabited quarters outside the walls which up till then had been prosperous and flourishing were looted and destroyed by fire. As we have said before, this was perhaps due to some internal disturbance or civil commotion rather than to foreign invasion.

¹ Wace, *Chamber Tombs* 3 ff.

² Wace, op. cit. 20 f.

³ Wace, op. cit. 12 f., 17, fig. 8, pl. xvi.

⁴ Blegen, *Zygouries* 157 (9) f.

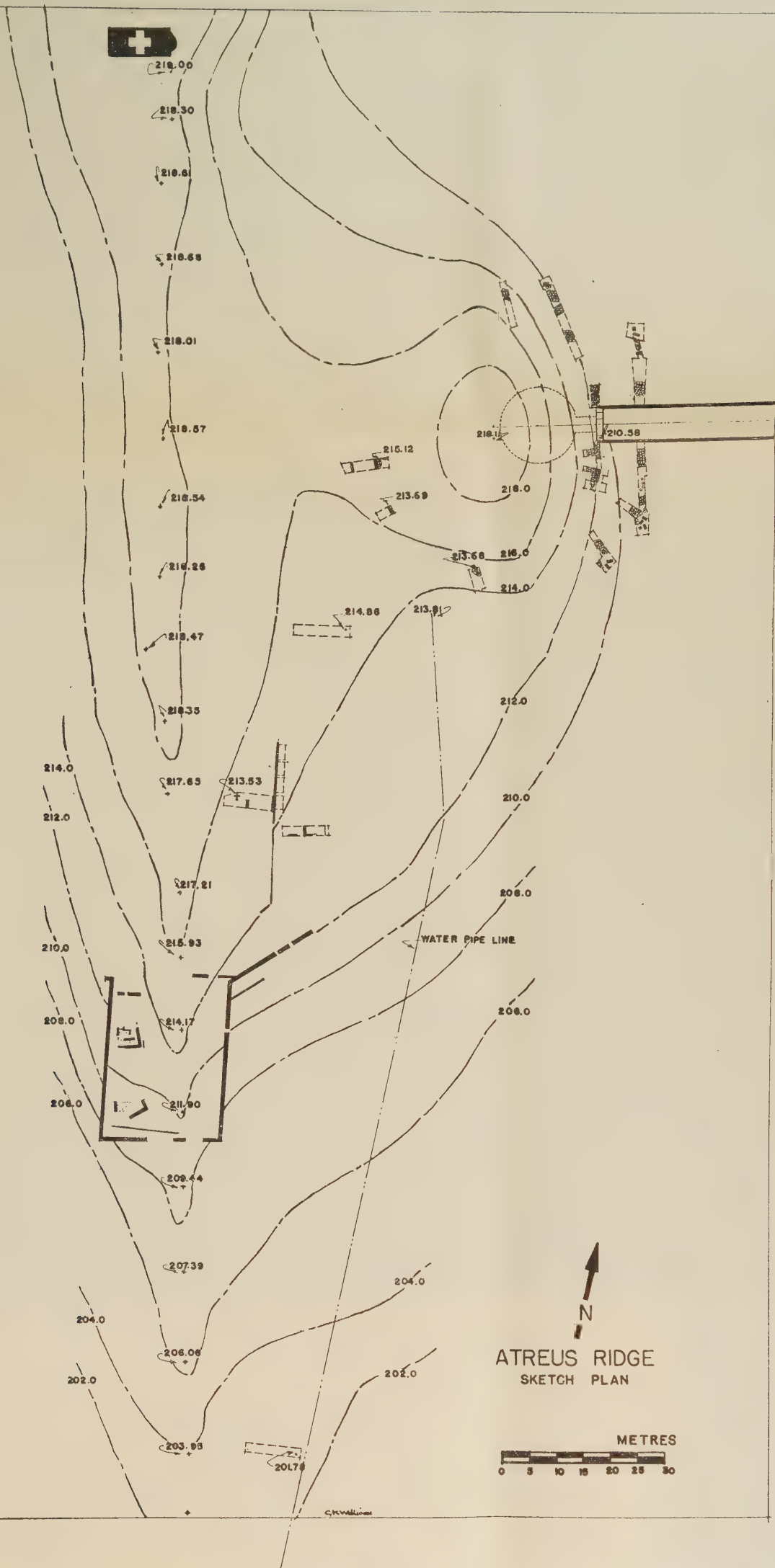


FIG. 7. MYCENAE: ATREUS RIDGE. SKETCH PLAN

The area east and west of the storeroom still awaits exploration. To the south of it there seems to have been another east-west cross-wall and another basement room with a floor partly of beaten earth or clay and partly of the cut-down surface of the rock. On the floor of this room we found a large round vessel of lead about half a metre in diameter which had been squashed flat on the destruction of the house. It is from this vessel that we have called the house the House of Lead. In the same room in the upper debris was an interesting fragment. It is part of a metal inlay (PLATE 28*b, c*), probably of silver much alloyed with copper in the usual Mycenaean manner and inlaid with gold. In this case the gold seems to be inlaid direct into the silver-copper. There is no intervening niello as in many other Mycenaean metal vases. The gold inlay represents a wing probably of a griffin or a sphinx and resembles a wing carved in ivory inlaid with enamel found by Tsountas in the grave in the dromos of the Tomb of Clytemnestra.¹ Similar wings occur in some fresco fragments from Tiryns found by Schliemann.²

Tests on the terrace farther south revealed more traces of the house and the deepest deposit was found just behind the south terrace wall (PLATE 27*b*). Here there was a considerable amount of debris packed against the inside of the wall. It contained a great amount of earlier pottery of L.H. IIIA style and some pieces that might be even earlier still. Among the fragments pieces of mugs of L.H. IIIA style were conspicuous. One of them we were able to restore (PLATE 29*a*) and it is shown in the restored drawing in PLATE 30. These mugs are of good fabric with a hard biscuit and a smooth polished surface and the clay is generally a yellowish-buff in colour. There seems to be a slip which in every case is practically of the same colour as the clay. The decoration is in a glaze paint which varies in tone from an orange-red to chestnut. The mug seems to have been a favourite shape at this period and many examples were found in the deposits below the Ramp House and in the rock cleft at the Treasury of Atreus.³ The shape is not popular in L.H. II except in the last stage of the period, and after L.H. IIIA its popularity declines, although examples of it are not uncommon.

The approach to the house seems to have been at the north-east corner of the terrace where an oblique ramp about 2 metres wide slopes up from the hill-side below. This has not yet been explored. It will be seen that much work remains to be done to try to work out the plan of the house. The whole of the east side awaits excavation and there is still much to be done on the west side, especially in the storeroom area. So far, no signs of any regular plan like those of the House of the Oil Merchant and the House of Sphinxes have emerged. We must remember in any case that denudation has been severe here on the top of this exposed ridge and that modern cultivation has also contributed to the ruin of walls and other constructions. It is still just possible that inscribed tablets may be found in the ruins, but tablets apparently were usually kept on the upper floors of houses and in this house the ruins of the upper floors seem to have been washed away by rain or worn away by human activity.

The pottery found in the deeper layers behind the south terrace wall has much in common both in shapes and in style and character with the pottery found in 1939 in the rock cleft on either side of the dromos of the Treasury of Atreus. As stated already, it can also be compared with the many fine pieces of kylikes from Tomb 505. We thus obtain confirmation of the view that the pottery in the rock cleft by the Treasury of Atreus was household debris thrown down the hill by the inhabitants of large and well-equipped houses which once stood on the top of the ridge, and that the tombs at the bottom of the ridge were those of the families who lived in the houses on the ridge above. We have not yet found any dump of debris contemporary with the House of Lead and we cannot yet identify any chamber tomb as that of the family which

¹ *BSA* xxv. 371, fig. 81*a*; Wace, *Mycenae* pl. 57*b*.

² Schliemann, *Tiryns* pls. vi, vii.

³ Wace, *op. cit.* 127 f., pl. 48*c*. Cf. *BSA* xxv. 80, pl. xiv *h, i*; xlix. 279.

occupied it. This must have been one of the wealthier residential quarters of Mycenae. These new facts help to fill in the details of our picture of the organization of Mycenae in the third Late Helladic Period.

Within the Cyclopean walls of the Acropolis stood the Palace of the king and large houses occupied by other members of the royal family or officers of state, such as the House of Columns or the House of the Warrior Vase. There were shrines such as Tsountas' House with manses attached.¹ There were warehouses such as the Granary by the Lion Gate. No doubt many other buildings connected with the administration of the realm lay within the walls, to say nothing of barracks for the royal guards. Outside the walls there were, as Tsountas long ago suggested, residential quarters where the civilian population lived. Of these quarters we have the houses like Petsas' House² and the Cyclopean Terrace Building on the north side of the ridge by the Lion Tomb and the group of houses formed by the House of Shields, the House of the Oil Merchant, and the House of Sphinxes. What cemetery was used by the inhabitants of the Citadel and of these houses we do not know. The population of the Citadel may have buried its dead in the chamber tombs found by Tsountas on the south-west slopes of Hagios Elias. The residential quarter on the Atreus Ridge had its cemetery round the lower slopes of that ridge on the east, south, and west. Its source of water would have been the Kato Pegadi. The houses on the ridge by the Cyclopean Tomb and Tomb of Genii probably had their cemetery in the chamber tombs which run northwards along the west side of that ridge. Their water supply would have come from the Epáno Pegadi. The residents of the Kalkani hill³ presumably used the tombs found by Tsountas and by us on the southern and northern slopes of that hill. They too would have drawn water from the Epáno Pegadi. Further exploration will no doubt provide more information on these points. We now, however, possess a much better idea of the system of the layout and inhabitation of Mycenae in the fourteenth and thirteenth centuries B.C.

A. J. B. WACE

¹ *JHS* lxxi (1951) 254.

² *PAE* 1950, 203 f.

³ Wace, *Chamber Tombs* 19 f.; *Mycenae* 21, 103 f.

MYCENAE 1939-1955

PART II. EPHYRAEAN WARE

(PLATES 31-32)

IN the excavations at Korakou in 1915 Blegen¹ first noted Ephyraean Ware as a definite and well-marked style of Mycenaean pottery. Its stratigraphic position places it in Late Helladic II and it is easily recognized in the pottery of that period. The characteristic shape² (FIG. 1) is a one- or two-handled goblet with a short stem. Other shapes painted in what may be termed the Ephyraean manner have not yet been distinguished.³ The one- or two-handled goblet with a short stem is clearly in its form imitated from vessels of metal. This has been well shown by Persson.⁴ It may thus be regarded as akin to the ring-stemmed Minyan goblet and its derivatives. Attempts have been made by Evans⁵ and some of his followers to suggest that such goblets and the Mycenaean kylix which is related to them have a Minoan origin. In view, however, of Persson's demonstration and the obvious facts these 'Minoan' theories may safely be disregarded as mistaken and tendentious.

The importance of Ephyraean Ware as a 'date-mark' or 'hall-mark' of the L.H. II period has so far been insufficiently recognized. It has been obscured by modern over-elaborate methods of classification.⁶ If an Ephyraean goblet has been found at any site, it has been classified as shape No. so-and-so decorated with pattern No. so-and-so. The all-important question of fabric is disregarded, for some scholars unfortunately believe that they can infallibly classify a vase from a photograph or a drawing and need not inspect the original. It is essential in these cases to observe and study not the shape nor the pattern by itself alone, but the two together in conjunction with the fabric of the vase. The scheme of the decoration can also be taken into account, but stylistic or psychological ideas should not be allowed to override other considerations. It is the vase *as a whole* which should be the object of study. Only thus can we eventually discern the full cultural and historical significance of its discovery, its stratigraphic position, and similar factors.

Ephyraean ware is a decorated subdivision of the ware called Yellow Minyan, which is a refined development of the ordinary Middle Helladic Grey Minyan Ware. Yellow Minyan Ware, however, is not the distinguishing mark of a period, but is a style which gradually evolves and thus may be said to cover several chronological stages. It begins before the end of the Middle



FIG. 1. KORAKOU: EPHYRAEAN VASE
(RESTORED), SCALE 1:4

¹ *Korakou* 54 ff., pls. vi, vii; *BSA* xxii. 182, pl. x. 2; xlix. 274-6, 279.

² Furumark, *Myc. Pottery*, Shape 254.

³ A jug with a cut-away neck from Prosymna (Blegen, *Prosymna* 415, fig. 681) is decorated in the Ephyraean manner.

⁴ *New Tombs at Dendra* 135 ff., fig. 117.

⁵ *PM* iv. 359 ff.; Forsdyke, *BMC Greek and Etruscan Vases* i, pt. 1, 113, 152, pl. xxxix.

⁶ e.g. by Furumark in his *Mycenaean Pottery* 492 ff. His description and discussion do not seem clear and are too much concerned with tectonic and syntactic features. He says the chief characteristics of Ephyraean syntax are 'free field arrangement and compositional reserve, the ornaments being placed isolatedly in the centre of the field or as an unframed zone at the level of the greatest diameter of the vase'. He, however, considers Ephyraean a definite Mainland ware.

Helladic Age and naturally continues in Late Helladic I and II until by L.H. III it has developed into what we may call undecorated L.H. III pottery. Just as L.H. III painted vases are related to the unpainted contemporary pottery, so the Ephyraean vases are related to the unpainted Yellow Minyan goblets of L.H. I and II.¹



FIG. 2. MYCENAE: PREHISTORIC CEMETERY, EPHYRAEAN FRAGMENTS

The clay of Ephyraean Ware varies in colour from a pinkish-buff to a greenish-yellow. It is baked hard and is covered with a slip or wash of the same clay and colour. The surface is smoothed and beautifully finished with a good polish. On this the decoration is painted in a lustrous paint which varies in colour from an orange-red to a purple-brown and almost black. Some of the colour variations are no doubt due to the firing, and the decoration on a vase may often be observed to shade from one tone to another.

On an Ephyraean goblet the decoration is confined to the two fields on either side between the handles and to the very bottom of the handles where they merge into the body of the vase. The decoration on the two fields of the body is limited to one decorative unit on each. The motives of the decoration divide easily into two classes, (1) Floral, (2) Marine. The first class comprises patterns that can be labelled as crocus, lily, iris, rosette, palm, and so on. None is sufficiently naturalistic to be recognized at once as, for instance, *Iris cretensis*, which is such a

¹ Blegen, *Prosymna* 411 f., especially nos. 525 and 184; Wace, *Chamber Tombs* 166. Cf. Goldman, *Eutresis* 162, 172.

feature of the Greek countryside in the early months of the year. They are stylized flowers, PLATE 31c, FIG. 3. In the fine goblet (FIG. 2d, e), which is shown also in a restored drawing



FIG. 3. PHYLAKOPI: EPHYRAEAN SHERDS (DRAWING), SCALE 1:1

(PLATE 32), the rosette, rendered by a master hand, shows this stylization to an unusual degree in the spiral or rotary twist of the inner circle of the design. It is a vortex. In the second class the favourite motive is the argonaut, with its three curls floating in the sea breeze above. It is a design admirably suited to the shape. The two examples of this pattern here illustrated,

PLATE 31*a, b*, give different renderings of this characteristic motive. Decoration below the handle is not always present, but there is sometimes a small simple quirk, chevron, or curl.

All these four fragments of Ephyraean Ware were found at Mycenae in the area of the Prehistoric Cemetery outside the citadel walls to the north-west of the Lion Gate. The larger fragments (FIG. 2*d, e*, PLATE 32) were found in the stratum just below surface the slightly to the east of the two Geometric graves G. I and G. II at the east end of the East-West Wall.¹ The earth at this point was not more than 0.70 m. deep above the rock and there was no stratification because the whole area had been much disturbed. There were some Hellenistic and classical pieces and many fragments of Middle Helladic and Late Helladic pottery, with the latter predominating. The Late Helladic pottery contained a considerable proportion of L.H. I and L.H. II fragments. The other Ephyraean fragments were found slightly farther south in the area immediately west of Tomb III of the Prehistoric Cemetery.² They lay below the surface layer in a rather confused stratum overlying the lower edge of the eastern part of the clay layer which covered the mound over the Tomb of Aegisthus.³ Here again there was no true stratification. There were some pieces of Middle Helladic pottery and many fragments of L.H. I and L.H. II, including several from Palace Style amphorae. Fragments of L.H. III pottery were scarcer in proportion. The source of this mixed pottery we cannot yet determine. The field has been cultivated for many years and was owned by one of the original families of the village once Charvati, but now called Mycenae. The debris may be rubbish thrown out from the citadel above to the east, for it does not seem to be dump from an excavation, although part of the area had apparently been tested by Tsountas. In any case it has been so much disturbed in the course of years that it has no stratigraphic value. So these Ephyraean fragments are of interest mainly as examples of good typical Ephyraean goblets.

The greatest attraction of an Ephyraean goblet lies in its proportions, which are perhaps its most characteristic feature. The proportional scheme is visible in the form. The body and foot are wonderfully adjusted in size and shape to each other. The handles are exactly calculated in length and width to suit the form and size of the body and the lip. The lip has the right width and curve to fit the circle and size of the body. Finally the decorative motives, floral or marine, are restrained. The pattern does not overload the field. Its limitation, simplicity, and admirable drawing are beautifully adapted to the form of the goblet and give a sense of true fitness and breeding to the whole vase rarely equalled in prehistoric pottery.

On the Mainland Ephyraean goblets whether decorated or not are rarely painted on the inside, though exceptional examples covered inside with a deep brown-black paint are not unknown. Also the lip of the vase is practically never picked out with a painted band.

In the Cretan imitations⁴ the fabric is less good. The proportions are less well planned, and the clay and the surface tend to be softer. The goblets are often painted inside with a brown-black paint and the lip too sometimes has a band of the same colour. Finally the decorative motives are larger in proportion and nearly always appear too big for the goblet.

A comparative study of the Mainland Ephyraean goblets and their Cretan imitations suggests that the Cretan potters were inferior in their sense of design both in shape and proportion and that both potter and painter were less artistic. The date of the Cretan imitations is confirmed by the examples recently found in L.M. II tombs at Knossos⁵ and at Katsambas.⁶ Their presence in those graves together with alabaster (another Mainland shape), swords, and other

¹ *BSA* 1, pl. 19.

² *BSA* xlv. 205 f., figs. 1, 2.

³ *BSA* 1, pl. 19.

⁴ *PM* iv, figs. 302, 306; Pendlebury, *Arch. of Crete* pl. xxxv. 2; Forsdyke, *op. cit.* A. 700.

⁵ *BSA* xlvii. 262 ff., fig. 9 (1. 2), pl. 55*b* (iii. 1).

⁶ *Antiquity* xxviii. 183 f., pl. viii.

objects indicates that at that time Knossos was subject to strong influence from the Mainland. In addition to most of the 'Mycenaean' sites¹ so far excavated in Argolis and Corinthia, Ephyraean Ware was found at Phylakopi² in Melos, FIG. 3, where it is obviously an import from the Mainland, and both Mainland and Knossian Ephyraean have been identified at Ialysos in Rhodes.³ Its cultural and historical importance needs therefore no further emphasis.

A. J. B. WACE

¹ To Blegen's list in *Korakou*, loc. cit., add *Zygouries* 159, pl. xv. It has also been found in Boeotia at Eutresis, Goldman, *Eutresis* 188 f., fig. 262.

² Sherds from the first excavation in the National Museum in Athens.

³ In Rhodes Museum, where my wife and I have seen

them thanks to the kindness of Dr. Kontes. The Cretan piece is from a goblet with big chevron-like designs on each side and painted inside. The Mainland piece is a chevron from the lower part of the handle of a goblet. It can be seen in *Clara Rhodos* x. 108, fig. 58.

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PART III. TWO TOMBS¹

(PLATES 33-35)

WHEREAS the 1954 tombs belonged to the House of Shields,² of the two uncovered in 1955 one was within the House of Sphinxes and the other lay immediately to the west of it.

TOMB G. 605 (PLATE 33a)

This burial does not need any lengthy description. It was found at the east end of an otherwise unfruitful trial trench dug immediately to the west of the modern road which runs along the western side of the House of Sphinxes. It consisted of the skeleton (in very poor condition) of a small child, placed on the rock. Two bronze pins lay together over the chest, and a cup was found on the rock beside the body. There was no longer any indication as to how the skeleton and the associated objects were originally protected.

CATALOGUE

1. *Cup*, shallow (55-9). PLATE 33d. H. 0.055 m. Max. di. 0.123 m. Di. of rim 0.122 m. Di. of base 0.051 m. Fair condition, but rim extensively chipped away. Clay buff, light brown slip. Paint rich brown, in parts unevenly applied. Shape, general and detailed scheme of decoration as on PLATE 33d, but note the following: the base is a flat ring; the interior is entirely painted with the exception of a reserved band just below the rim, punctuated by groups of nine short vertical lines; handle barred; two small bosses project from

the handle zone, opposite the handle (one is barely visible on PLATE 33d).

2. *Pins*, bronze, two (55-10). PLATE 35a. In good condition, of identical measurements. L. 0.352 m. Di. of shank 0.002 m. Di. of disk 0.021 m. Di. of bulb 0.01 m. Shape and structure as on PLATE 35a; *b* shows these pins, the two central ones, in comparison with the pins found in tombs G. 603 and G. 604.³

COMMENTARY

It is clear from the cup that this burial belongs to the Geometric Period, probably not far in date from Tomb G. II⁴ from the Prehistoric Cemetery area, and consequently to be assigned to the eighth century. There is no parallel in the Argolid that I can find to the shape of this cup; comparison might be made with a solitary cup from the Kerameikos.⁵

The evidence of the pins agrees with that of the vase; they show an improved technique as compared with those in Tombs G. 603 and 604:⁶ the disks are more delicately modelled; the shafts between disk and bulb are slightly tapered; the bulbs are more definitely biconical; and the lower shafts start with a square section, gradually becoming circular, instead of being circular the whole way down—on this last point, the same principle is adopted in the pin from Grave G. II no. 53-636, though on this latter pin there is a difference between the setting of the rectangular sections above and below the bulb.⁷

¹ I am most grateful to Professor A. J. B. Wace, Director of Excavations at Mycenae, for his kind invitation to publish this material, in spite of my not having assisted at the excavation. I am also extremely grateful to Miss E. Wace, from whose excellent notes this report has been collated, and who was responsible for the photographs.

² BSA I. 239 ff.

³ Cf. BSA I. 242, fig. 2, and 246, fig. 4.

⁴ BSA xlix. 260 ff. The lozenges and dots can be seen on the oinochoe 53-339 (pl. 45).

⁵ Ker. v. i. 281 and pl. 110. Inv. 419 (4398). No context, but dated to the second half of the ninth century.

⁶ BSA I. 241 ff., figs. 2 and 4.

⁷ BSA xlix. 263 and pl. 45. For the progressive development in the technique of manufacture of pins, reference should now be made to Jacobsthal, *Greek Pins* 4 ff.

No hand-made ware was recovered from this burial; one cannot be certain, however, that all the once associated objects were in fact recovered. The tomb had possibly been disturbed.

TOMB PG. 606 (PLATE 33*b*, *c*)

This is a cist tomb. Those responsible for its construction dug down into the corner of the Mycenaean wall which forms the outer south face of Room 10 of the House of Sphinxes; a rectangular tomb was then formed by stones almost on the rock level, its inner dimensions being 0.79×0.42 m. Within this, the skeleton of a child was laid, in a crouched position with the head to the west and probably facing north. A small Protogeometric jug lay in the north-west corner of the grave, from which two bronze rings were also recovered. The tomb was then covered by three long slabs, and immediately adjoining these, to the west, three smaller stones were laid, on top of which was placed an amphora of Pie Ware. In the mouth of this vase a Pie Ware saucer had been placed, and inside this rested a small hand-made vase, which may be a lamp. Inside the amphora a small hand-made jug was found, showing signs of extensive burning, and a set of twenty-four pebbles, one being considerably larger than the rest. That this group of objects was contemporary with the burial is strongly suggested by the fact that the stones which had originally been removed to make room for the tomb were subsequently tipped back on top, covering both the tomb itself and the objects that had been placed immediately above it.

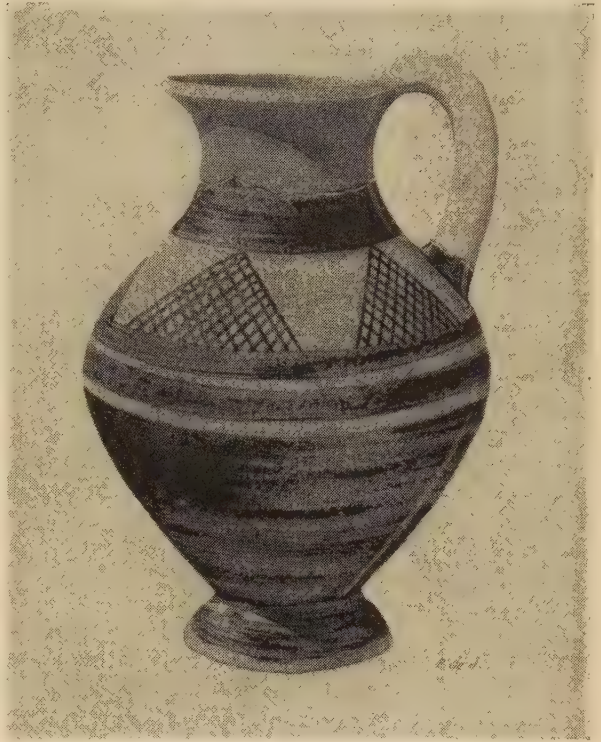


FIG. 1. TOMB PG 606, JUG 6 (RESTORED DRAWING), SCALE 2:3

CATALOGUE

1. *Amphora*, belly-handled, of Pie Ware (55-201). PLATE 35*c*. H. 0.225 m. Max. di. 0.175 m. Di. of mouth 0.137 m. Di. of base 0.11 m. Good condition, but a few fragments lost. Clay oatmeal, fired pink in one place; rough burnished slip outside. Flat base. Handles rounded, springing from below area of greatest diameter. Shape and incised decoration (applied to the outer edge of the handles as well as to the rim) otherwise as on PLATE 35*c*.

2. *Jug*, hand-made (55-202). PLATE 34*a*. Found inside 55-201. H. 0.088 m. Max. di. 0.069 m. Di. of mouth 0.067 m. Complete; burnt. No base. Clay probably oatmeal with burnished slip. For shape see PLATE 34*a*.

3. *Saucer*, of Pie Ware (55-203). PLATE 34*a*. Found inside mouth of 55-201. H. 0.052 m. Di. of mouth 0.108 m. Complete, except for rim slightly chipped. Clay oatmeal,

light slip, mainly inside, and traces of burnishing on bottom; unpainted. Lower part rounded; lip square in section. For shape and incised decoration see PLATE 34*a*.

4. *Lamp* (?), hand-made, of Pie Ware (55-204). PLATE 34*a*. Found inside 55-203. Max. H. 0.025 m. Di. of mouth 0.042 m. Complete, except for handle, the stump only of which remains. Unused. Clay, orange oatmeal, slipped and burnished; unpainted. Opposite the stump of the handle the mouth is pinched in to form a spout; this is not very clearly shown on PLATE 34*a*, but may be seen on PLATE 33*b*, which shows the vase *in situ*. For a discussion on this, see the commentary on the tomb.

5. *Stones*, small, twenty-four (55-205). PLATE 34*b*. One is considerably larger than the rest. Found inside 55-201. Di. of large stone *c.* 0.045 m. Di. of the rest *c.* 0.015 m. The

smaller stones are roughly circular. The purpose of these objects is not ascertainable, but it seems likely that they represent a child's game, such as 'Jacks', in which the large stone is thrown into the air, and then as many as possible of the smaller stones are picked up before the large stone is caught again. Such a game is played by Greek children of today.

6. *Jug*, wheel-made (55-206). PLATE 34a. Found inside the tomb. The upper part is missing, and only the stump of the handle remains. Preserved H. 0.09 m. Max. di. 0.068 m.

Di. of base 0.039 m. Clay of good quality, but containing some grit and lime; buff, with surface polished light brown. Paint black, perished in places. Base conical, slightly uneven; conical underneath. For shape and decoration see FIG. 1: note that there are four sets of cross-hatched triangles on the shoulder.

7. *Rings*, bronze, two (55-207). PLATE 34c. Both are much corroded, and only a few fragments remain of the one. Di. 0.018 m. Thickness c. 0.003 m. The rings were probably circular in section.

COMMENTARY

The vase which dates this tomb, no. 6, is clearly Protogeometric; it is probably a jug (see restored drawing, FIG. 1) rather than a trefoil-lipped oinochoe, and if it is, it belongs to Late Protogeometric.¹ There is little need of further comment on the hand-made vases: their appearance, and that of Pie Ware vases among them, in this Protogeometric tomb, confirms the evidence of the tombs excavated at Mycenae in 1954.²

The object tentatively identified as a lamp presents a problem, for if it is a lamp it is the only one so far discovered between the end of the Mycenaean Age and the seventh century in Greece and the Aegean; furthermore, in Cyprus no such object is known between the end of the Bronze Age and Cypro-Geometric II. Thirdly, the lamp is unknown to the Homeric Epic, except for one passage, the authenticity of which has been in dispute from ancient times.³ None of these points necessarily excludes the possibility of our vase being a lamp: so far as the archaeological evidence is concerned, it may only mean that the custom of including lamps among tomb furniture was, on the whole, discontinued—for our evidence from these centuries comes to a great extent from tombs. So far as the Homeric Epic is concerned, the silence may be accidental: Homer speaks indeed of houses being lit by braziers and torches, but this need not exclude the use of lamps for other purposes; there can at least have been no lack of fuel.

Even so, in view of the absence of archaeological evidence, and of Homer's virtual silence, one should regard this object with suspicion. If it is a lamp, it is not one in the Mycenaean tradition,⁴ nor has it any similarity to the earliest post-Mycenaean Cypriot lamps.⁵ On the other hand, it might well be considered a forerunner of one of the earliest clay lamps from Greece, from Eleusis.⁶ It is unfortunate that this vase from Mycenae was never used.

In conclusion, it is not possible to say with certainty either that this is a lamp or that it is not. I am inclined to believe that it is, and I like to think that it may have been included among the other objects in this burial for a child which in its lifetime was afraid of the dark.

V. R. D'A. DESBOROUGH

¹ On Protogeometric jugs, cf. Desborough, *Protogeometric Pottery* 66 ff. The nearest in decorative system to the Mycenae vase is the jug in Copenhagen (CVA, Copenhagen, fasc. ii, pl. 66, 3).

² BSA l. 239 ff.

³ *Od.* xix 34. For a discussion of this passage and the absence of lamps during the so-called Dark Ages see Lörimer, *Homer and the Monuments* 509-11. The archaeological

evidence for Greece is summarized by Broneer, *Corinth* iv. ii. 5; that for Cyprus by Gjerstad, *SCE* iv. 2, 402, and by Schaeffer, *Enkomi-Alasia* i. 223.

⁴ Cf. Wace, *Chamber Tombs* 136, 142 and pl. xliii, nos. 46-48.

⁵ *SCE* iv. 2, 171, fig. 37.

⁶ *JHS* xxxi (1911) 93, fig. 18.

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PART IV. 'EGYPTIAN' AMPHORAE, CORRECTION

PENDLEBURY's account (*Aegyptiaca* 56, nos. 92-94) of the three so-called Egyptian amphorae¹ from chamber tombs at Mycenae in the National Museum at Athens contains a misprint. His number 4695 should read 4569. We may add that according to the inventory this vase is from Chamber Tomb 93. The other two, nos. 2924, 2925, one of which is inscribed, are from Chamber Tomb 58.

This error in the number has caused some confusion, see Bennett, *Proc. Am. Philos. Soc.* vol. 97. 437 and my note in Vol. L of this Annual, 179, n. 7.

Vase No. 4695 in the National Museum, Athens, is, according to the inventory, from Aphidna and is a Middle Helladic vase. It is published in *AM* 1896, pl. 14, 4-5.

Since the misprint has already brought about some misunderstanding I hope this note will clear up the difficulty caused to those interested in amphorae of this type. I have to thank Miss Virginia Grace for kind help in this matter. She has now published a detailed account of such jars.²

A. J. B. WACE

¹ Furumark, *Mycenaean Pottery* 74 f., shape 13a. He (following Stais, *Coll. Myc.* 126) gives the numbers correctly, but does not note the misprint in *Aegyptiaca*.

² See her paper 'The Canaanite Jar' in *The Aegean and the Near East: Studies presented to Hetty Goldman* 80 ff.

CRETAN AXE-HEADS WITH LINEAR A INSCRIPTIONS

(PLATES 36-37)

I DISCUSS four Linear A axe-head inscriptions. Two of them have not previously been published, one is discussed (though without a photograph) in *AE* 1953-4 (ii), 64 by N. K. Boufides, and one, though published by Evans in his first article on Cretan script before his excavations at Knossos (*JHS* xiv (1894), 280), is referred to neither in *S.M. i* nor by Carratelli.¹ Its attribution to Linear A is probable but not certain.

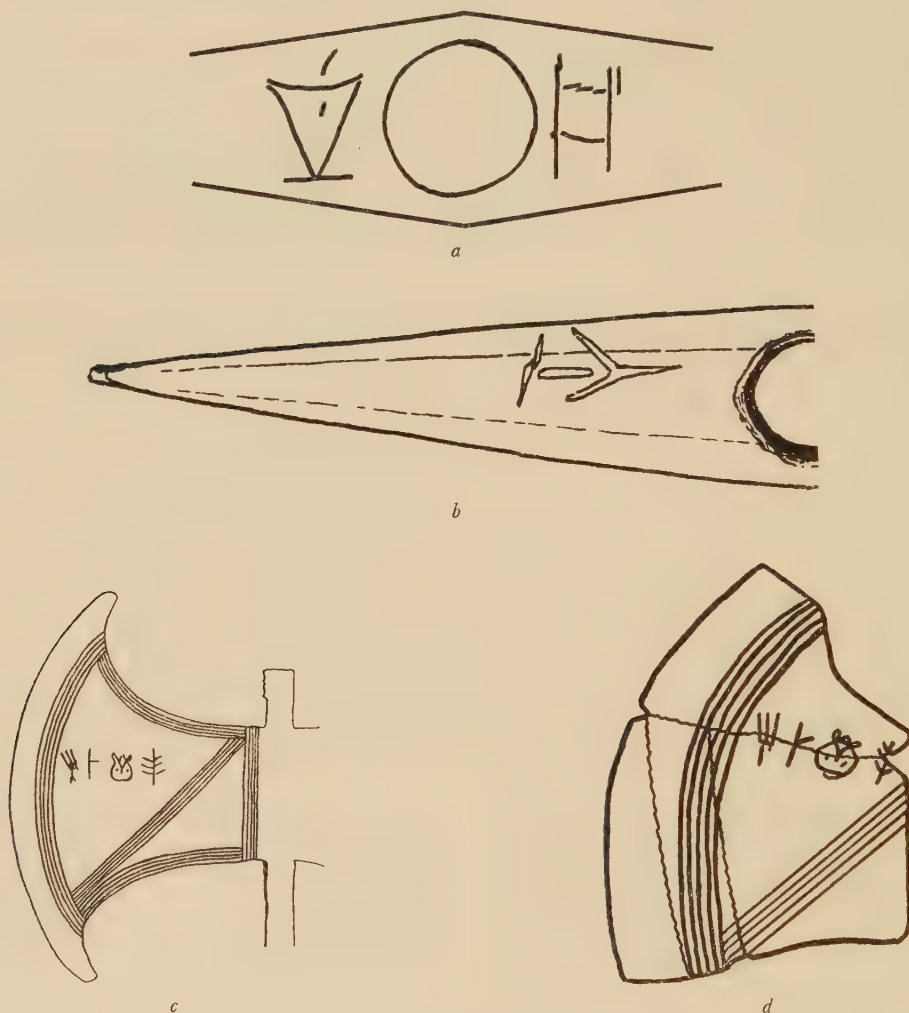


FIG. 1. (a) 1, c. 1:1. (b) 2, c. 1:1. (c) 3, SCALE UNKNOWN. (d) 4, c. 2:1.

¹ G. Pugliese Carratelli, 'Le Iscrizioni preelleniche di Haghia Triada etc.' (*MA* xl). The Linear A inscriptions are referred to by his classification, and Linear A signs by

his L series. Linear B signs are referred to by Bennet's numeration. *Scripta Minoa i* is abbreviated *S.M. i*.

1. The first inscription (FIG 1a, PLATE 36a) is on a bronze axe-head from Crete (site unknown) on display in the British Museum (1954 10-20 1), hitherto unpublished. The signs are 1.5 cm. in height, clearly and boldly incised, one on each side of the haft. Surprisingly they are followed by what seems to be a word-divider.

The first sign is L6. There can be no doubt about the identification, though the particular form is of interest. The triangle and base-line belong to the convention of the HT tablets, the curl of the upright to the equivalent sign (69) in Linear B. It is welcome to find the relationship between the two signs so neatly confirmed, and some hitherto dubious shapes can now with greater confidence be classified as L6. The following table gives the variants:

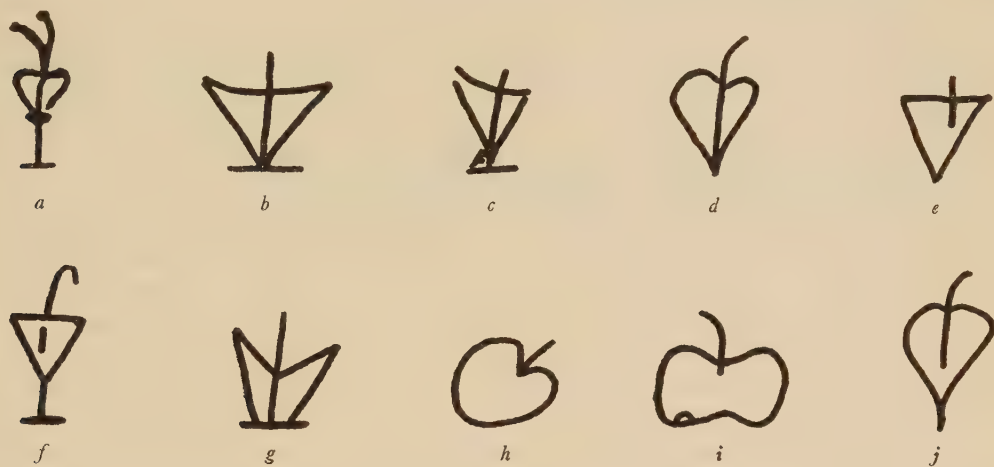


FIG. 2

(a) Pictographic 87 (Evans, *S.M.* i. 213). This, rather than the 'leaf' or 'crocus' sign (88), appears to be the common ancestor. It occurs only once, on a clay label from Knossos (*S.M.* i. P81b), and perhaps means the same as its descendant on a clay sealing from Hagia Triada (see (j) below).

(b) The universal form on the HT tablets. Also on a M.M. III libation vessel from Palaio-kastro (Pc. 8a).

(c) HT 49—the only irregular form on the HT tablets. It is presumably the result of haste on the part of the scribe.

(d) The standard Linear B form (69).

(e) M.M. III vase from Knossos (Kn. 5).

(f) L.M. I tablet from Palaio-kastro (Pc. 1).

(g) L.M. tablet from Tyliisos (Ty. 3b).

(h) Tablet from Phaistos (Ph. 2).

(i) Steatite vessel from Apodoulou (Ap. 2).

(j) Cr. 3, 16b (Levi, *Ann.* viii-ix (1925-6) 76) from Hagia Triada. The similarity to the Linear B form is very curious since the cretulae are of the same date and probably from the same room (Halbherr, *MA* xiii (1903) 21) as a large number of the HT tablets whose calligraphy for the sign is so standardized. Perhaps the writer of the label was not a scribe but an official accustomed to a more cursive script suitable for material other than clay. Or perhaps a traditional use of the sign on labels preserved a traditional shape. If so, the inference would be

that the Linear B syllabary was created comparatively soon after Pictographic had fallen into disuse, when the form preserved in Cr. 3, 16b was still current.

The second sign, L25, is standard throughout Linear A. There is no clear case of an overlap in shape with its evident Linear B correspondent (55).

Transliterated mechanically on the sign-values given by Ventris and Chadwick for the Linear B correspondents, the inscription reads *tu-nu*. I have no suggestion for the meaning of such a word. The only other syllabic groups in our Linear A material where these two signs occur together are:

6-25-95 (*tu-nu-ma*) HT 116a, 117a

6-91-25 (*tu-qe-nu*) HT 25a

2. On one side of the haft of a bronze axe-head bought by Evans at Kritsa near Lato but reported to be from Selakonos (*JHS* xiv (1894) 280) there is an inscription (FIG. 1b, PLATE 36c) which he took as a single sign but which could well be intended as two. If so, the inscription must be Linear A and read L30-L31 (corresponding to Linear B 1-31 *da-sa*). The sign-forms are standard enough but I cannot claim certainty without inspection of the original axe.¹ The signs are not found together in any other Linear A syllabic group.

3. For the photograph of the inscription (FIG. 1c, PLATE 37a) on a gold votive double-axe from the Arkalokhori cave I am indebted to Frau Annelise Sittig, who tells me that in July 1956 it was on the New York market. The axe was originally bought from a peasant soon after the discovery of the similar Arkalokhori double-axes now in the Iraklion Museum, and was until recently in the possession of Herr Bruns. I regret that I do not have its measurements.

4. The fourth inscription (FIG. 1d, PLATE 37b) is on a fragment of a silver votive double-axe also from Arkalokhori discovered by Marinatos and published by Boufides (*AE* 1953-4, 64). It carries what is clearly an identical inscription on the same part of the axe. The two dots after the second sign reproduced in Boufides's drawing seem to me after inspection of the original in Iraklion Museum (626) to be pittings.

The first sign on both axes is L100. For backward-sloping prongs cf. Ap. 1 sgn. 3 (confirmed as L100 by the recurrence of a certain form of the sign in a similar context on Pc. 8a); for the slight fork of the legs cf. 158a, Pc. 12; for the protrusion below the cross-line (certain on the silver axe, doubtful on the gold one) cf. *inter alia* Ap. 2, Kn. 10, Pc. 2, HT 28a, 35a, 131. For the Linear B sign which corresponds to L100 there are three possibilities, 28 (-i), 43 (-ai), 52 (-no). Palaeographically the first is the least and the last the most likely. But for other reasons the probabilities are reversed, and I would prefer to leave the question open.

The last three signs on both axes are clearly L30-L95-L92. Transliterated into their Linear B correspondents (1-80-4) they would read *da-ma-te*. It is tempting to understand this as Damate(r) = Demeter. She is plausibly of Cretan origin, and it is generally agreed that the double-axe was employed in the cult of a female goddess.² This interpretation

¹ It is now in the Ashmolean Museum, Oxford (*AE* 85). Mr. Boardman, who has kindly provided me with the photographs PLATE 36, tells me that two signs are clearly intended. Measurements of axe-head: L. 19.5 cm., H. 5.7 cm., Th. 2.5 cm.

² Margaret Whaites ('The Deities of the Sacred Axe', *AJA* xxvii. 28) finds no instance where the double-axe 'is obviously the attribute of a male divinity only'. So Evans, *P. of M.* ii. 277, Nilsson, *Minoan and Mycenaean Religion*² (1950) 226. The well-known ring from the Acropolis treasure at Mycenae (Schliemann, *Mycenae* 354 ff. and numerous later discussions) shows a goddess with a double-

axe in the background. Since she is holding poppies and being offered what looks like barley, she could well be Demeter (cf. Nilsson, *op. cit.* 347 n. 22). Whether her name can be Minoan is dubious. Even if one accepts the suggestion in *Et. Mag.* 265 s.v. Δηώ that her name is derived from Cretan δηά = κριθά, it is difficult to explain how its last half can be Minoan—unless Greek popular etymology read μάτηρ into a Minoan word of similar sound. In *h.Cer.* 122 f. she tells Celeus' daughters that she came from Crete. But this again may not be significant. She is in disguise, and in the *Odyssey* Crete is a normal exporter of disguised personages. Cf. also Hes. *Theog.* 971.

could be seriously considered only if L100 were used as a prefix. The supports one can quote are:

(a) 100-62-85	(100- <i>pa</i> -85)	HT 44b
62-85-53-54	(<i>pa</i> -85- <i>ra-re</i>)	HT 96b
(b) 100-103-53	(100- <i>ki-ra</i>)	HT 25a
103-53	(<i>ki-ra</i>)	HT 103

but I am afraid that these are waxen wings.

For the sake of completeness I add a list of the other Aegean inscribed axes known to me:

- (a) Evans *JHS* xiv (1894) 280. Apparently two hieroglyphic signs. From Delphi. Bronze.
 (b) Marinatos *AA* 1935, 248, 254. From Arkalokhori. Fifteen hieroglyphic signs. Bronze votive.
 (c) M. Platon informs me that there is said to be an inscribed axe from Arkalokhori now in a private collection in Alexandria.¹

MAURICE POPE

¹ For help in the publication of these axes I should like to thank in particular the Director of the British School at Athens, Mr. M. S. F. Hood, and Mr. John Boardman (note 1, p. 134). Dr. N. Platon gave me every facility at Iraklion Museum. I am grateful also to Prof. S. Marinatos for

permission to photograph the silver axe 4, and to Mr. N. K. Boufides for some interesting discussions. My thanks are due also to the Trustees of the British Museum for the photographs of 1, and to the Ashmolean Museum for those of 2.

NOTES AND INSCRIPTIONS FROM THE CIBYRATIS AND CARALITIS

(PLATES 38-42)

IN the summer of 1952 I visited Cibyra and the other cities of the tetrapolis, Bubon, Balbura, and Oenoanda, crossing from the last by the high pass of Girdev Gölü into Lycia; in the following year I walked from Cibyra eastwards to Lake Caralitis, Lagbe, and the interesting site at Kozagacı. The combined results of these journeys are presented here.¹

CIBYRA

The village of Horzum has lately been raised to the status of a *kaza*;² some improvement may therefore be expected in the roads and in the accommodation for travellers. The inscriptions I saw in the village were exclusively epitaphs of Roman date, the great majority of them on round columnar altars.

1. In the garden in front of the Sadık Hoca Camii, a round funeral altar 1.22 m. high, 0.55 m. in diameter.³ Letters 24-31 mm. high.

Συντύχης Στε-
φάνω τῷ ἀνδρὶ
μνήμης ἔνεκεν
καὶ ἑαυτῇ ζώσῃ

Συντύχης, as a female name, seems likely to be an error for Συντύχη, or perhaps Συντυχίς.

2. Built into the back wall of the same mosque, a block broken on all sides except (probably) at the top, 0.30 m. high, 0.40 m. wide, thickness not ascertainable. PLATE 38a (squeeze).

P

[ῆ δεῖνα] Κλαυδίου Φλαβιανοῦ [τῷ δεῖνι]
[τοῦ δεῖνος ἀν]δρὶ καὶ Ὀρφεῖ καὶ Ἀλβανῶ [ἀδελφοῖς?]
[καὶ τῷ δεῖνι τέ]κνω ἐποίησα τὸ μνη[μεῖον - -]
5 [- - - - -] καὶ ἑαυτῇ ζώσῃ ΤΕΚΝΑ [- - -]
[- - - - -] ἢ χωρὶς τῆς ἐμῆς γνώμ[ης - - -]
[- - - - - δώ]σει τοῖς κοιρίοις μου προ[στείμου κτλ.]

L. 1. The *rho* seems isolated, possibly a date.

L. 3. The second *kappa* is corrected from *beta*.

L. 5. ΤΕΚΝΑ seems out of place. The *nu* is poorly written and (as in l. 6) resembles ΑΙ: ζώσῃ τε καὶ is not a possible reading.

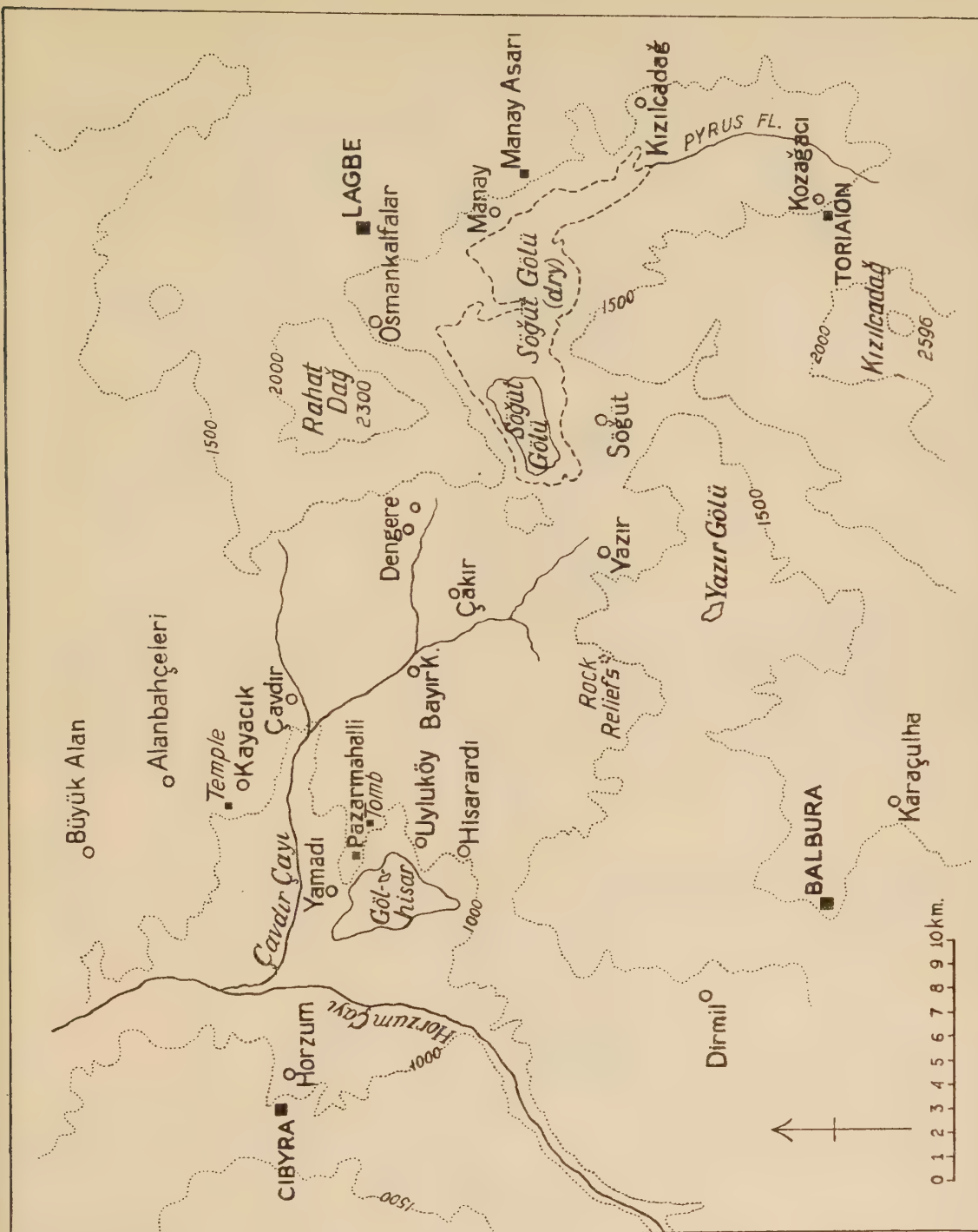
L. 6. We expect [ἐὰν δέ τις ἕτερον θάψ]ῃ χωρὶς τῆς ἐμῆς γνώμ[ης]: cf., for example, *Alt. von Hierapolis* no. 241. The payment of the fine to the woman's κύριοι is unusual, and apparently protects the tomb only during their lifetime.

¹ The following abbreviations are used: Spratt and Forbes = Spratt and Forbes, *Travels in Lycia, Milyas and the Cibyratis* i-ii (1847). *Reisen* ii = Petersen and von Luschan, *Reisen in Lykien, Milyas und Kibyratis* (= *Reisen in südwestlichen Kleinasien* ii, 1889). I have used the traditional form 'Caralitis', but it is possible that 'Cabalitis' is the

correct one; see L. Robert, *Rev. Phil.* xiii. 180 f.

² An unusual honour, omitting the intermediate rank of *nahiye*. The new *kaza* has taken the name of Gölhisar (below, p. 144).

³ In general, measurements of diameter are exclusive of mouldings.



Ancient sites and remains ■, ■ Modern towns and villages ○ Contours at 500 metre intervals

FIG. 1

3. In a street in the village, a round altar broken at the top: letters roughly written and barely legible, 20–35 mm. high.

Κιλῆς Τρωίλλου
 Ὀρέστη Ἀριστίπ-
 πο[υ - - - - -]
 [- - - - -]

For Κιλῆς (the reading is hardly guaranteed) and similar names see Sundwall, *Einheimischen Namen* 105–6.

4. In the yard of a house, a round altar more than 0.84 m. high, 0.49 m. in diameter. Letters 28–33 mm. high.

Κράτερος
 Κοίντω τῷ
 καὶ Πυλάδῃ τῷ πατρὶ
 μνήμης
 ἔνεκεν

5. In the same yard, a similar altar more than 0.82 m. high, 0.44 m. in diameter. Letters 20–23 mm. high.

Ἐλεύθερος καὶ
 Πλάρος καὶ Ἰέρων
 [καὶ Π]ολέμων
 5 [. . .] τῷ πατρὶ
 καὶ Εὐτυχίᾳ τῇ
 μητρὶ φιλοστορ-
 γίας ἔνεκεν

L. 2. I was at first inclined to read Πλάρος, which seems a perfectly possible name: cf. Πλάρασα, Πλάριος.

6. By the road just outside Horzum on the south; recently dug out (in 1952) and later removed to the village, a round altar 1.27 m. high, 0.53 m. in diameter. Letters 30–34 mm. high.

Ὀρέστης Μήνιδι καὶ
vac. Τύχῃ τοῖς
 γονεῖσι μνή-
 μης ἔνεκεν

The spelling γονεῖσι for γονεῦσι is of course commonplace; cf. 35 below.

7. Together with the last, a similar altar 1.12 m. high, 0.53 m. in diameter. Letters 28–30 mm. high.

Νανα Ἰέρωνος
 Τίτῳ Νεμετωρί-
 ω τῷ ἀνδρὶ μνεί-
 ας ἔνεκεν

For Νεμετώριος, i.e. Numitorius, cf. *IGR* iv. 262.

8. In a field close to Nos. 6 and 7, a similar altar 1.07 m. high, 0.78 m. in diameter, the inscription only partly visible. Letters 39–43 mm. high.

[- - - - -]ς καὶ
 [- - - καὶ Ἀν]δρέας
 [- - - - -]δι τῇ μη-
 [τρὶ μνήμῃ]ς ἔνε-
 [κεν]

9. At a fountain in the village called Manavlar Pınar, on the edge of a sarcophagus lid.

ΕΤΟΥΣ ° ΔΡΡ ° ΣΕΜΕΛΟΣ ° ΟΒ ° ΦΛΑΒΙΑΝΟΥ

ἔτους δρρ°. Σεμελος ό β' Φλαβιανοῦ

Year 194 of the era of Cibyra = A.D. 217.¹ For the rare name Σεμελος cf. *Reisen* ii, no. 254.

10. Mosque of Hacı İrfat Efendi; supporting the porch, a round altar 0.76 m. high, 0.39 m. in diameter. Inscription badly written in letters 35-40 mm. high.

Μῆνις Τληπᾶ
Ἀρτέμιδι τῇ γυ-
νεκί μνήμης
ἔνεκεν

For Τληπᾶς (short for Τληπόλεμος) cf. 38 below.

11. Ibid., a similar altar 0.60 m. high, 0.45 m. in diameter. Letters 32-36 mm. high, with pronounced apices.

Ὅρεστη
Φαίδρου
τοῦ Εἰλου

12. Ibid., a similar altar, published by Collignon in *BCH* ii (1878) 593 f., no. 27, since when the stone has been moved. The first four lines read:

ἔτους ΙΚΕ
Αὐρ. Κοίντος
Αὐρ. Κοντιανῇ [*sic*]
τῇ θυγατρὶ κτλ.

The numeral ΙΚΕ was quite correctly read by Collignon, but must presumably be an error. Collignon was inclined to emend to ΡΚΕ = A.D. 148, but the repeated Αὐρ seems conclusive against this. If Ι could be accepted as = 1, the figure would be 221, or A.D. 244.

13. In the wall of the house of Hasan Coşar, a rectangular block 0.67 m. high, 0.53 m. wide, 0.34 m. thick. Letters 24-26 mm. high.

Δημόκρ-
ιτος Πύρ-
ρου ζῶν ἐ-
αυτῷ ἐπο-
ίησεν

14. Let into the floor of the house of Emin Özasan, a white marble block 0.82 m. high, 1.31 m. wide, 0.22 m. thick. Letters 33-36 mm. high, carefully cut. *PLATE 38b*.

Κλ. Ἰέρων Πριμιγενεία τῇ χρηστῇ τρόφῳ
καὶ Κλαυδίῳ Φιλήτῳ τῷ ἀνδρὶ αὐτῆς ζῶντ[ι]
μνήμης ἔνεκα.

ἔαν δέ τις ἐνχειρήσῃ θεῖναι ἕτερον ἐν
5 τῇ σορῷ, ἀποδώσει τῷ φίσκῳ δηνάρια
δισχίλια πεντακόσια, καὶ ὑπόδικος ἔσται
τυνβωρυχίᾳ

15. *PLATE 38d* shows a damaged 'omphalos' stone which in 1952 was standing at the door of a house at the eastern edge of Horzum village. It is 0.75 m. high and shows in

relief two pairs of griffins facing each other on either side of a floral decoration; the upper part of the stone is covered with leaves in relief.

16. *PLATE 38e* shows the narrow side of a funeral altar built into a house-wall in the village. The other sides are at present invisible.

¹ I have adopted the date A.D. 23 for the era of Cibyra; but its correctness is not assured.

BUBON

From Horzum to Ibecik is about six hours' walk. At the entrance to Ibecik village, just above the road, is the well-known rock-tomb (PLATE 38e). It has a porch and two columns with rough Ionic capitals;¹ the uprights of the door and the pediment over it are shown in relief. Inside, a stone ledge runs round three sides; the roof is roughly arched.

The ruins of the city are on Dikmen Tepe south of the village; they are not impressive. At the foot of the hill on the south are the damaged remains of various funeral monuments, including a broken sarcophagus lid with the recumbent lion familiar in this region. A little above these is the following epitaph.

17. Round funeral altar 0.87 m. high, 0.42 m. in diameter; bucranium relief, from which ribbons hang down. Inscription above and below the relief in letters 15–23 mm. high. Roman date.

Καλλικλῆς τρις τοῦ Ῥόδωνος Βου(βωνεύς)
 [τ]ὸ μνημεῖον
 ἀνέστησεν
 αὐτοῦ καὶ τῆς
 5 γυναικὸς αὐ-
 τοῦ Ἀρτεμ-
 (relief)
 εἰς Κάστορος {ρος} [ζώ]ντων, εἰς
 ὃ πᾶσαν τὴν δαπάνην
 ἀνήλωσεν ὁ τρόφι-
 10 μος αὐτοῦ Συνέγδημος κα-
 θῶς [- - - - -]
 [- - - - -]

Ll. 6–7. Ἀρτεμεις, if not an error, is presumably treated as indeclinable; in 40 and 51 below we have dative Ἀρτεμειδι. At Termessus, where the name is especially common, the genitive is Ἀρτεμειτος, the dative Ἀρτεμει. After this I read KACTOIOEIOI . . NTΩN.

A little more than an hour to the east of Ibecik, directly above the pass on the road to Dirmil and Balbura, is the fort marked on Kiepert's map.² It bears the ubiquitous name Asar Tepe. On the summit, 1,250 metres above the sea, is a confused complex of dry rubble walls 70–80 cm. thick; at the foot, in the pass, is a ruined building of some size, said to have formerly contained an inscribed stone, recently broken up.

18. Ibecik, in a private garden; a round altar 0.665 m. high, 0.30 m. in diameter. Letters of Imperial date, 21–26 mm. high.

Ἑρμαῖος Τρω-
 ίλου Ἀρτέμειδι
 τῇ θυγατρὶ φιλοσ-
 τοργίας ἔνεκεν

19. The tombstone published by L. Robert (*Ét. Anat.* 367) from a copy by Holleaux is now standing in a street in Ibecik village, partially buried. It is a round altar 0.34 m. in diameter and more than 0.60 m. high, damaged at the

top. In l. 1 the name Κερσεος is correctly read. In l. 2 the stone has Μείλων, as read by Holleaux, not Μένων as conjectured by Robert. In l. 6 Γῆ only was written, not Γῆν.

¹ Spratt and Forbes (i. 265) say strangely: 'two rudely shaped (Doric?) pillars'.

² 'Ru.' This seems to be the same described by Spratt and Forbes, i. 266.

BALBURA

The site of Balbura now goes by the name of Çölkayığ¹ Asarı. The altitude at the foot of the acropolis hill is 1,345 m.; the summit rises just over 1,500 metres. Near the top are walls of good polygonal masonry, 1·70 m. thick, which seem to be of classical date. The 'theatre' at the foot of the southern hill consists of a hollow in the hillside with a few rock-cut seats here and there;² in the place of the stage-building is a long platform of stone slabs supported on arches, with a smaller platform projecting towards the hillside (PLATE 39*a*). No trace remains of any superstructure. On the low ground at the foot of the acropolis are several of the familiar lion-tombs.

20. Balbura, lying just above the end of the main street, a plain limestone block (complete), 1·63 m. long, 0·42 m. high, 0·42 m. thick, inscribed in monumental letters of Roman date 11 cm. high.

ΩΚΑΙΤΩΟΠΙΣΘΟΔΟΝ

This is apparently the dedication of a building: [ὁ δεῖνα τὸν ναὸν σὺν τῷ - - - -]ω καὶ τῷ ὀπισθοδόμ[ω]: but I could not determine to what building it belonged.

21. The inscription published in *Reisen* ii. 184, no. 237, has recently become wholly visible by the removal of the block that formerly covered a large part of it; it is on a large rectangular base 2·38 m. high, 0·65 m. wide, 0·73 m. thick,

set horizontally in the wall bounding the street. Letters of the second century A.D., 28–34 mm. high. The text proves to differ considerably in detail from the reconstruction proposed by Petersen.

ἡ βουλὴ καὶ ὁ δῆμος
 ἐτείμησεν Πολυδεύ-
 κην Θόαντος Μηνο-
 φίλου καὶ ταῖς δευτέ-
 5 ραῖς τειμαῖς ταῖς ἀνα-
 [γεγ]ραμμέναις, γυμνα-
 [σιαρ]χήσαντα μεγαλο-
 π[ρ]επῶς, ὑπογραμμα-
 [τ]εύσαντα τοῦ Λυκίων
 10 ἔθνους φιλοτείμως, τα-
 μιεύσαντα πιστῶς, γρα[μ]-
 [μα]τεύσαντα μεγαλο-
 φρόνως καὶ πλουσίως,
 ἱερέα θεοῦ Διονύσου δι-
 15 ἄ βίου, ἄνδρα καλὸν καὶ
 ἀγαθὸν καὶ πάσῃ ἀρε-
 τῇ καὶ δικαιοσύνῃ δια-
 πρέποντα

The most serious disagreement is in l. 14, which was previously restored [καὶ τῆς πόλεω]ς οὐ δι[αλείποντα].

¹ 'Desert boat': no one seems able to explain this curious name, which is not a familiar Turkish expression. The name Katara is not now applied to the site, but a hill with

a chrome-mine half an hour to the east is called Gadira.

² See the description in Spratt and Forbes, i. 270.

OENOANDA

Oenoanda is situated on the southern slope of a lofty hill¹ above the village of Incealiler. PLATE 39*b*, *c* show two examples of post-classical polygonal; *b* is a tower in the Hellenistic fortifications, *c* is a terrace wall presumably of Roman date in the central part of the city. On the steep west slope of the hill is a necropolis containing lion-tombs, tombs of 'Carian' type (that is, rock-cut sarcophagi with separate lids), and in one place, carved on the rock-face, a human figure in an aedicule and beside it the pair of hands which is understood to denote an untimely or violent death.

The site identified with Termessus Minor, or Termessus ad Oenoanda, lies close to the foot of the hill of Oenoanda, just across the bridge over the river. It is on two low hills, or rather mounds, between which the road passes. The northern mound is about 150 metres long, the southern rather longer; on both are lying numerous architectural fragments, but nothing is standing. There is no fortification wall, and no inscriptions.² This tiny unprotected place can never have had any real independence: it lies right under the hill of Oenoanda, on Oenoandan territory, and can only have been founded by some agreement with that city. The site is now called Kemerarası.³

22. Incealiler, at the house of Akif Ince, a votive relief to the god Kakasbos, of familiar type, said to have been found on the hill of Oenoanda in 1949 or 1950. The god is

mounted on a horse and holds a thick club in his upraised right hand. PLATE 39*d*.

Ἀνδρέας θεῶ
Κακασβει εὐχήν

The form of the dative Κακασβει, in place of the usual Κακασβω, seems to be unique.

23. I give also (FIG. 2) a photograph of a drawing, made by a Turk, of a similar Kakasbos relief which I have not seen. The drawing was given to me at Caunus, but the

stone is stated to be at the *yayla* of Ören, some 5 kilometres south-east of Oenoanda.

Πο(λ)έμων Διο(γ)ένος (?)
Κακασβω εὐχήν

For Kakasbos see especially Robert, *Hellenica* iii. 38 ff., and Metzger, *Catalogue des monuments votifs du musée d'Adalia* 13-16. He is located especially at Telmessus and on the plain of Sekiovası and eastwards.⁴

From Oenoanda to Girdev Gölü is about six hours' walk. Just outside the *yayla* of Ceylan is a curious stone called Kalkantaşı (Shield Stone), illustrated in PLATE 39*e*. It is a circular disk of stone 6 feet in diameter and 24 cm. thick, set in a socket on top of a rocky knoll; it faces north-east and slopes a little backwards. Nothing seems to be known of its antiquity or original

¹ More than 1,000 feet above the plain. The altitude of the theatre is 1,360 metres.

² The inscriptions of Termessus Minor were erected in Oenoanda.

³ In the inscription of Araxa, which I published in *JHS* lxxviii (1948) 46 ff., mention is made of a war between Termessus and the Lycian League. I there expressed some doubt as to whether Termessus Major or Minor was meant, and some scholars have preferred the latter on the grounds of its greater proximity. Since visiting the site (supposing it to be correctly identified) it appears to me absolutely

out of the question that Termessus Minor could have engaged in war with the Lycian League—or indeed in any war on its own account, without the consent and co-operation of Oenoanda.

⁴ L. Robert reports the discovery in 1948, on the plain of Sekiovası, of two votive reliefs to Kakasbos (*Hellenica* vii. 58). I do not know if either of these is identical with my 22 or 23, as Prof. Robert has not answered my letter of inquiry; one of them is evidently different, as it gives Kakasbos the epithet ἐπῆκοος.

purpose; in recent times it has been used as a target for rifle practice. There is said to have been at least one other similar stone in the neighbourhood, now destroyed.

From Ceylan (alt. 970 m.) begins a long gradual climb to the pass (2,060 m.), followed by a steep descent to Girdev Gölü (1,680 m.). The lake is shallow and formed entirely of melted snow; it is normally dry by August. It is in a bowl completely surrounded by hills and affording extensive pastures; in the summer it supports some two hundred families, drawn from a number of different villages. My host was from Düver (Tlos) in the Xanthus valley. In antiquity this



FIG. 2. KAKASBOS RELIEF NEAR OENOANDA

was a summer residence for certain families of Oenoanda (*JHS* lxviii (1948) 57; *Reisen* ii. 159). Near the edge of the lake, sometimes forming an island in it, is a piece of raised ground surrounded by a wall 1 metre thick, enclosing numerous walls and foundations of houses, also a plain sarcophagus. These ruins are perhaps contemporaneous with the church mentioned in 24. The very fine lion-tombs are at the foot of the hills on the west, well clear of the lake; PLATE 40a shows another tomb in the same neighbourhood. There is a small ancient cemetery at the extreme south-west corner of the plain.

24. Girdev Gölü, lying beside the path near the northernmost lion-tomb, a lintel-block 2.27 m. long, 0.33 m. high, more than 0.52 m. thick, partially buried. Letters very irregular.

+μνήσθιτι Κ(ύρι)ε τοῦ δούλου σου Ἰσι-
δόρου πρεσβ(υτέρου) τὸν κτησάμεν-
ον τὸν ἅγιον ὕκον τοῦ(τ)ον

κτησάμενον evidently for κτισάμενον. The second *tau* of τοῦτον has been miscarved and resembles a *pi* crossed by an oblique stroke. There is writing also on another side of the block, of which I could read only ΝΕΘΕΚΑΙ i.e. [ἀ]νέθηκε = ἀνέθηκε (?).

From Girdev a path leads down in about six hours to Gömbe, the ancient Comba.

CARALITIS (Map, FIG. 1)

From Cibyra a flat plain extends eastwards as far as Çavdır. In the south-east corner of this plain is the lake of Gölhisar (alt. 930 m.). Gölhisar itself is a small island in the lake, some 70 metres high, joined by a stone causeway to the shore.¹ The summit of the island carries some remains of a wall built with mortar, and at the highest point are a number of rock-cuttings, including a rock chamber. On the low ground near the end of the causeway are some wretched fragments of a castle, likewise built with mortar. These ruins unquestionably belong to the domain of Zor Ali, a *derebey* who formerly held sway in this region; I saw nothing genuinely ancient on the site apart from a tomb of 'Carian' type sunk in the rock at the landward end of the causeway.² Nevertheless, it is hardly doubtful that this is the site of the town said by Polybius (xxi. 34) and Livy (xxxviii. 14) to have been in the possession of Moagetes. It seems to have been called ἡ ἐν Λίμνῃ πόλις.³

In a little valley opening eastwards from the lake just to the north of the causeway is the site of the great bazaar that used to be held periodically,⁴ but is now discontinued. A Turkish cemetery close by is said to be that of the 'city' of Zor Ali Bey. The numerous ancient stones it contains have mostly come from Cibyra; Fellows quotes one epitaph, to which I can add two more.

25. Gölhisar, Pazarmahalli, a round funeral altar 1.12 m. high, 0.525 m. in diameter, inscribed near the bottom in letters 35-40 mm. high.

Τροκον-
δα ἱερεῦ
χαῖρε

26. Ibid., a similar altar 1.05 m. high, 0.44 m. in diameter. Letters 35-40 mm. high.

Δαϊκράτης
Ἡρακλᾶ ἑαυ-
τῷ ζῶν καὶ
τῇ γυναικὶ
ἑαυτοῦ

From here a road runs east to Bayır Köyü; on it, about a mile from the above cemetery, is a second, containing the following epitaph:

27. Round funeral altar partially buried, at least 0.94 m. high, 0.45 m. in diameter, with a relief in an arched panel showing a man reclining on a couch, in front of which stands

a woman: under the couch is a footstool. Inscription below in letters 25-30 mm. high.

Σωσος Πολ-
έμωνος ΑΤΩΝ

¹ It is briefly described by Spratt and Forbes i. 254-5, and by Fellows, *Lycia* 256-7.

² To this should possibly be added the rock-cuttings at the summit, which I found quite undatable.

³ The name is corrupted in the MSS. of Polybius, which have τῆς ἐντέμνῃ πόλεως. Those of Livy read *Allymnē* or *Allimnen*. (For this information I am gratefully indebted to Dr. A. H. McDonald.) There can be little doubt that ἐν Λίμνῃ and *ad Limnen*, as read in recent texts, are correct. The name Alimne should disappear. In mentioning places on Manlius' march Livy regularly adds *quae adpellatur* or

an equivalent phrase only to significant Greek names: so 'Gordiutichos quod vocant, Xylinen quam vocant Comen, vicum quem Aporidos Comen vocant, Axylon quam vocant terram'. The single exception is in ch. 18, *vicum quem vocant Tyscon*: I have wondered if this is a sufficient reason for suspecting the reading *Tyscon*, a name otherwise unknown, and substituting *Atyos Comen*, the 'village of Atys' recognized by Ramsay in an inscription at Altıntaş not far away (Ramsay, *CB* ii. 584, n. 3).

⁴ Fellows, loc. cit., Spratt and Forbes, loc. cit.

κὲ Σελημιδι τῇ γ-
 υνεκὶ αὐτοῦ
 [-] ΦΙΛΩ[- - -]
 [- - - - -]

L. 2. ΑΤΩΝ (*sic*) is presumably ἀτῶν} i.e. ἑαυτῶ. The name Selemis appears to be new.

L. 5. ?[κὲ] Φίλω[νι - -].

About a quarter of a mile to the north-west of this point, a little above the road from Çavdır to Uyluköy, is a rock-tomb of Lycian type (PLATE 40b). It has round beam-ends and a porch with outer and inner double doors; the pediment is only roughly indicated on the sloping rock. Inside is a stone bench at the back and on the right, but not on the left. There is no inscription.

The village of Yamadı at the north-east corner of the lake contains a number of ancient stones which also may have come from Cibyra.

28. Yamadı, round funeral altar 1.075 m. high, 0.45 m. in diameter. Letters 35-40 mm. high.

Γάιος Ἰούσ-
 του Νανῶ
 τῇ μητρὶ τ-
 ὄν βωμόν
 μνήμης ἔν-
 ΕΚΕΝ

For the female name Νανῶ cf. 36 below.

29. The inscription published by Cousin and Diehl (*BCH* xiii (1889) 333, no. 1) from the bazaar of Gölhisar is now in the village of Yamadı. The last two lines (damaged on

the right) are quite correctly read: the first name is Ἀστρανίαν, the second probably Πρ[ε]μαγ.

All these inscriptions are of Roman date.

Çavdır, the centre of a *nahiye*, lies two hours east of Yamadı on rather higher ground at the eastern extremity of the plain. It is full of ancient stones, including numerous tombstones of Roman date like the rest.

30. Çavdır, lying in front of the municipal building, a round funeral altar 1.08 m. high, 0.38 m. in diameter. Letters 26-34 mm. high.

Θόας δ' Μαροισα
 Ἰουλίαν τήν γυ-
 ναῖκα φιλοστορ-
 γίας ἔνεκεν
 ἀνέστησεν

L. 1. Μαροισα is presumably the genitive of Μαροισας, an unknown name. For ἀνέστησεν in the epitaphs of this region see Robert, *Ét. anat.* 393.

31. Çavdır, supporting a corner of the mosque; a round altar partly buried, with relief showing two human figures much damaged. Height more than 0.70 m., diameter 0.32 m. Inscription below in letters 25-28 mm. high.

ἔτους ογ'
 Ἀνδρέας Λουκί-
 ου Λευκίῳ μν-
 [εἰ]ας χάρι[ν]
 [- - - - -]

Year 83 of Cibyra is A.D. 106. The *gamma* in l. 1 has a curious shape, and might possibly be

read as L: but year 280 = A.D. 303 seems much too late, especially in view of the spelling Λεύκιος in l. 3 (though not in l. 2).

32. Çavdır, at the house of Ali Paşalar, a round altar 0.96 m. high, 0.42 m. in diameter. Letters 22-25 mm. high.

Φιλόδαμος
Εὐταξία τῇ
θυγατρὶ
μνήμης ἔνεκεν

33. Çavdır, at the house of Bayram Çetin, a rectangular altar 1.00 m. high, 0.38 m. wide, 0.28 m. thick, with relief showing a damaged human figure in an aedicule. Letters 23-26 mm. high.

Ἀρτεμεις Μή-
νιδος Σάκρου
Μήνιδι τῷ πα-
τρὶ
(relief)
μνείας χάριν

34. Çavdır, at the *misafirodası*, a round altar 0.91 m. high, 0.49 m. in diameter. Letters 33-34 mm. high.

Ἀππας Σω-
σου Τατιδι
τῇ γυναικὶ
μνήμης
ἔνεκα

35. Çavdır, at a coffee-house, upper part of a round altar 0.34 m. in diameter. Letters varying in height from 23 mm. in l. 1 to 38 mm. in l. 3.

Καλλικλῆς καὶ Τρωί-
λος τοῖς γλυκυτά-
το(ι)ς γονεῖσιν
Ἀπαρτᾶται καὶ
[- - - - -]

L. 3. There is a space for the *iota*, but the letter was never carved.

L. 4. The *pi* is almost certain; of the *alpha* only the pointed tip remains. I have not seen this name elsewhere, nor anything very much like it.

36. Kayacık, about 5 kilometres north-west of Çavdır; supporting the balcony of the house of Abdurrahman Kaya, a round altar partly buried; height more than 0.67 m., diameter 0.33 m. Letters 19-25 mm.

Τρωίλος τῷ
πενθερῷ
καὶ Νανος
ἢ θυγάτηρ
5 καὶ Ἑλπίς τῷ
[ἀ]νδρὶ μνίας χά-
ρις (leaf)

The dead man's name is surprisingly omitted. For Νανος cf. 28.

37. Ibid., beside 36, a round altar partly buried, more than 0.63 m. high, 0.38 m. in diameter. Roughly inscribed in letters 32–35 mm. high.

Μουσαίου
τοῦ Μουσαίου ζῶν

Nothing more was written.

Half an hour to the north of Kayacık is the hamlet of Alanbahçeleri. At the gate of the cemetery are four round altars, three of which are inscribed, but the inscription of one is so obscured by a tree that I could make nothing of it.

38. On the right of the gate, a round altar 1.23 m. high, 0.38 m. in diameter, with a relief on a strongly projecting panel showing two human figures closely resembling each other. Letters 32–33 mm. high, comparatively well written.

ἔτους· 10'· Αὐρ· Πο-
σιδώνις καὶ Ἀνδρέ-
ας καὶ Πολέμων οἱ
ἄδε[λ]φιδεῖς Ἀνδρεά-
5 δι Τληπᾶδος ΟΓΑΙ 
μνίας χάριν

Year 210 of Cibyra = A.D. 233.

L. 5 is difficult. The last letter of Τληπᾶδος is small and blurred, little more than an upright stroke being visible. After this ΟΓΑ is clear, and the following upright seems to be an *iota*, but this is not certain. After this the surface is broken away. Before the final upright my squeeze shows a horizontal stroke at the top of the line; it would accordingly be possible to read (e.g.) Ὅγαγεῖ as an ethnic or demotic, but no such place-name is known to me. Alternatively, should we read Τληπᾶ, ΔΟ κτλ.?

I am not clear who the two figures in the relief are supposed to be.

39. On the left of the gate, a round altar 1.00 m. high, 0.48 m. in diameter. Letters 12–15 mm. high, so worn in the middle part as to be almost effaced.

Ἄννα μετὰ Ἰέ-
ρωνος τοῦ υἱ-
οῦ Πολέμωνι
τῷ υἱῷ μνή-
5 μης ἔνεκα.
ταῦτα τὰ
μ[ν]ημεῖα
ἐάν τις
[μ]ετένεν-
10 κη ἢ μετεπι-
γράψῃ, μετὰ
τοῦ γένους
ἀπόλοιτο

The era in 38 must presumably be that of Cibyra, and I take it that we are still on Cibyrate territory.

At a spot called Marmarlı in the fields ten minutes west of Kayacık are the foundations and some architectural fragments of a building, apparently a temple *in antis*, 9 m. wide and at least 11 m. long. There was formerly a block here, evidently a statue-base, with foot-holes of about life size, but it has been removed and I could not trace it.

At Çavdır I was shown a Kakasbos relief (PLATE 39*f*) of familiar type but uninscribed. It was said to come from a spot in the mountains to the south called Incirliburun, which I have not been able to locate.

Dengere (Denkre, Tenger) is two hours to the south-east of Çavdır. It is a village of some size, in two sections a quarter of an hour apart. It lies in a green valley through which flows a confluent of the Çavdır Çayı.¹ The mosque, in the eastern section, is ancient and is considered a fine specimen of its kind. In the yard outside it are collected numerous ancient stones, including a large block with lions' paws, a column 1.5 m. high with sixteen flat flutes, and a number of inscribed stones. There are other inscriptions inside the mosque, but most of them have been built in and covered up.

40. Dengere, inside the mosque; a round altar 1.31 m. high, 0.44 m. in diameter, with relief showing two human figures badly obliterated. On the lower border of the relief is the single word Ἀττάλος. Below this, in larger letters,

Κράτερος
Ἀρτεμειδι
τῇ μητρί

41. Dengere, beside the mosque; upper part of a round altar now 0.56 m. high, 0.34 m. in diameter. The relief shows five persons reclining on their elbows on a couch, with a standing figure at each side: below the couch is a table with three crinkly legs, between which are objects resembling vases: on the table are a wine-bowl and other

objects, apparently foodstuffs (fruit? cakes?): to the left of the table, in incised outline (not relief), is a horned animal with a hump, apparently a zebu. Of the inscription, l. 1 is on the upper moulding, ll. 2-4 above the relief, l. 5 below the relief. Letters 20-25 mm. high. PLATE 40*c, d*.

χαίρετε παρ[οδεῖται]
ἔτους ἀξρ'
Μῆνις Νοήτου
μετὰ τῶν ἀδελφῶν
5 [- - -] ΝΙΑC
[- - - - -]

In l. 2 the form of the *xi* is peculiar; I hardly know if it may be intended for a *κορρα*.

42. Ibid., a round altar 1.05 m. high, 0.38 m. in diameter; letters 22-25 mm. high, very regularly written.

Τ. Φλ. Καπίτων Ἀνθού-
ση τῇ ἰδίᾳ θρεπτῇ
μνήμης ἔνεκεν (leaf)
εἰ δέ τις τοῦτο τὸ
5 μνημεῖον σαλεύ-
σει ἢ τὸν βωμὸν
βαλεῖ κάτω, ἐκκέχ-
ται πανοικεί (leaf)

L. 5. For σαλεύειν of damaging a tomb cf. Heberdey, *Reisen in Kilikien*, no. 94. ἀσάλευτος is also used of a tomb, for example in an unpublished inscription at Selge.

L. 7. ἐκκέχεται is surprising, at least in a prose inscription. The verb has literary authority in the sense 'be lost or forgotten' (LSJ, s.v. ii. 2), but I have not myself seen it in an inscription. And the optative would be expected.

¹ See Spratt and Forbes, i. 252.

43. Dengere, supporting the porch of the mosque, a plain round column without moulding, 1.09 m. high, 0.39 m. in diameter. Irregular letters 24–33 mm. high.

Π[ο]λυδεύκης
 Τρωίλος ὁ Πολυδεύ-
 κου Τρωίλου Μοσ-
 χίωνος Πία Κλέ-
 5 ωνος Διοσκουρί-
 δου τῇ μητρί·
 καὶ Τρωίλος καὶ Ναυ-
 νηλῖς οἱ Πολυδεύκου
 Τρωίλου Μολητος
 10 Πίαν τὴν μητέρα καὶ
 Πολυδεύκην τὸν πα-
 τέρα·
 καὶ τὰ Γηδος Πολυ-
 δεύκου τέκνα τὴν
 15 μάμην.
 Ὕβριστος καὶ Κλέ-
 ων οἱ Ἀρατοφάνους
 Ὕβρίστου

Some of the persons at least have double names: Πολυδεύκης Τρωίλος is clearly such, Κλέωνος Διοσκουρίδου, Γηδος Πολυδεύκου, and Ἀρατοφάνους Ὕβρίστου are doubtful. I take it that Μοσχίωνος and Μολητος are patronymics. The relationships are not too easy to sort out: it looks as if Pia must have married two husbands, both of the name Polydeuces Troilus. Ges in l. 13 is presumably a sister¹ of Polydeuces Troilus in ll. 1–2. Lines 16–18 may be a later addition, though there is no very obvious change in the character of the script.

44. Ibid. beneath 43, a rectangular base 0.46 m. high, 0.66 m. wide, 0.64 m. thick; inscription on the lower moulding in careful script.

(leaf) Φλ. Φιλήτη (leaf) καὶ (leaf)

It is not clear where the inscription continued.

These monuments at Dengere are noticeably different from those of Cibyra, which are monotonous in their similarity of shape, size, and phraseology. The round columnar altar is still in evidence, but the difference is nevertheless marked. I think it may be safely assumed that we are no longer on the territory of Cibyra. Spratt and Forbes (i. 252) suggest that Dengere may be Sinda. They do not support the suggestion by argument, and it has not found approval in more recent times; the question of the location of Sinda remains very open. We read in Livy xxxviii. 15: 'a Cibyra per agros Sindensium exercitus ductus, transgressusque Caularem amnem posuit castra. Postero die est praeter Caralitin paludem agmen ductum; ad Madamprum manserunt.' The corresponding passage of Polybius is not preserved. The river Caularis must be (as is generally accepted) the Çavdır Çayı: there is no reasonable alternative. If Livy's order of mention is accurate, Manlius reaches Sindian territory before crossing the Caularis; the only possible position for Sinda is then at or near Bayır Köyü (Bayındır). To reach this,

¹ Or brother? Prima facie a male name would be expected here, but Γης (a rare name) is elsewhere female: see *MAMA* vii. 169, 532; *Belleten* xviii (1954) 471.

Manlius might proceed either along the left bank of the Caularis or south of the Çavdır Dağı by Yamadı and Pazarmahalli. His first camp would then be in the neighbourhood of Çakır. The alternative route is by Çavdır and Dengere. Since Cibyrate territory extended certainly, I think, as far as Çavdır, we must in this case suppose that Manlius crossed the Caularis before entering the *agri Sindensium*. I feel no serious difficulty in this: Livy's meaning is that the army's route from Cibyra lay in the direction of Sinda, that is east, and after crossing the river he encamped in the territory of that city. Having followed this route, I can answer for it that it offers excellent camping-ground in the valley of Dengere, and no difficulty in the terrain.¹ Neither at Bayır nor at Dengere has a city-site been found, but for so obscure a city, no doubt, nothing very grand need be expected.²

The next stage of the march is clear. Whether from Bayır or from Dengere, Manlius climbed to the pass above the west end of Söğüt Gölü (Caralitis L.), down to the lake and along its north-west side to Osmankalfalar. This village is full of ancient stones, and must surely be the modern representative of Madamprus.³

The altitude of the lake is 1,350 metres, but there is water only at the west end, which produces great quantities of tall reeds, largely used as fodder; when cutting these the inhabitants paddle about in boats of the most primitive design, hollowed out of logs.

The monuments at Osmankalfalar display great variety. They include a lion-tomb lid of the same type as those mentioned above, two reliefs of the Dioscuri and 'Helen', each over a fountain, a lion's head and two phallus-stones also set up over a fountain. Over a third fountain are three reliefs: (a) 48 below; (b) two figures closely resembling each other; (c) a remarkable female figure. Of these last I was unable to obtain satisfactory photographs.

45. Osmankalfalar, over a fountain; relief 0.45 m. high, broken on the left, showing two horsemen and a female figure between them, much damaged. The horsemen have

flowing cloaks resembling wings. Inscription below; square omicron.

[ὁ δειῖνα τοῦ δεινός] Διοσκόροις εὐχὴν

For these Dioscuri reliefs in this region see most recently Metzger, *Catalogue*, 24-27.

46. Osmankalfalar, in front of the Köyodası, a round altar 1.13 m. high, 0.44 m. in diameter, with relief showing two groups of three human busts, with a bunch of grapes

between them; at the back, a single figure. Inscription below; letters 22-23 mm. high. PLATE 41a (squeeze).

Ενας Ἑρμαίου ἢ γυνὴ
 Τρωίλου καὶ τὰ τέκνα
 αὐτῆς Ἑρμαῖς καὶ Μῖνις
 Τρωίλου Δεκνοῦ [*sic*] ἀνέστι-
 5 ταν [*sic*] τὸν πατέρα μνίας
 χάριν

The name Δεκνος seems unknown: perhaps it is an error for Δέκμου.

¹ Not having been to Bayır I cannot directly compare the two routes, but in general the country around here is not difficult for an army.

² I take it that *agros Sindensium* implies independent territory, not merely a portion of the *chora* of Cibyra. Kiepert puts Sinda, with a query, at Büyük Alan. There is here apparently some sort of ancient site, which I have not seen; but in other respects this location is much less satisfactory. Büyük Alan lies well off the natural line of

march; we must therefore suppose that its *agri* extended into the Gölhisar Ovası, which is hard to believe: the whole of this plain is dominated by Cibyra. Ramsay (*CB* i. 267) doubts the existence of Sinda, and thinks Isinda is meant.

³ Or whatever its true name was. Dr. McDonald informs me that two forms of the name have early MS. authority, namely *Madamprus* and *Mandrupum*. The forms *Manandrum* and *Mandropolin*, read in old editions, have no authority.

47. Ibid., a rectangular base surmounted by a round plinth, 0.69 m. high, 0.75 m. wide, 0.66 m. thick, broken on all sides except the top; letters 25–30 mm. high.

[Πολ]υδεύκης καὶ Α[-]
 [- -] Μήνι καὶ Ενα [-]
 [- -] εἰ μνήμης εἰ[νε]-
 [κα' εἰ] δέ τις ἀδικ[ή]-
 5 [σει - - - - -] V!![-]
 - - - - -

48. Osmankalfalar, over a fountain, a stele with relief showing a female figure holding in her right hand a pair of scales and in her left an object resembling a cornucopia.

The inscription below is complete, but I do not understand it (PLATE 41*b*, squeeze).

49. The inscription published in *Reisen* ii. 171, no. 212, is now in the village. The first name in l. 1 is Δηόας.

The village of Manay contains ancient stones, but not in such abundance or variety as Osmankalfalar.

50. Manay, over a fountain at the south-eastern edge of the village, a votive relief representing a mounted deity. The horse proceeds at a sedate pace to the right; the

rider's right hand is raised behind him and holds a thick object, no doubt a club. Inscription below, very badly damaged.

- - ΨΑΙϞΜ - -
 - - - ΚΑ . ΒΑ - -

The deity represented seems undoubtedly to be Kakasbos; in l. 2 the debris of his name is perhaps discernible. Beside this relief is another similar, but even worse preserved, which perhaps also represents Kakasbos; it has no visible inscription.¹

51. Manay, at the gate of the mosque, a round altar upside down, 0.87 m. high, 0.40 m. in diameter: letters 20 mm. high, regular but almost effaced.

Μῆνις [. .] Α[- - -]
 καὶ [. . .] ΑϞ [- -]
 [ΑΡΤ]εμειδι vac.?
 μνίας χάριν

About half an hour to the south-east of Manay is the fortified site, called as usual Asar, of which the ancient name was probably Eukereia.² On the summit of a low hill a level area some 95 m. by 55 m. is enclosed by a good wall of coursed polygonal masonry, presumably of Hellenistic date, 1.45 m. to 1.70 m. thick (PLATE 41*c*). At the highest point are the foundations of a building about 14 m. by 10 m., with interior walls. On the south side a sloping approach leads up to an entrance; the gate is not preserved. The whole hill, inside and outside the wall, is thickly strewn with sherds, most of which are of Roman date, and none earlier than Hellenistic. The long slope towards the lake is covered with masses of unsquared building blocks and many foundations of houses. The necropolis is on a lower hill to the north; there are a dozen or more lion-tombs of the familiar type.³

¹ My photographs of these two reliefs, taken under difficulties, are not worth printing; I shall be pleased to send copies to anyone who is interested.

² Heberdey-Kalinka, *Bericht über zwei Reisen* (1896), 9, no. 25. I could not find this stone in the cemetery, but

no. 26 is still there. (In line 4 of the latter read surely Νανηλης rather than Νάνη Αῖς.)

³ A photograph of one of them in *Belleten* xviii (1954), fig. 4.

52. Manay Asarı, lion-sarcophagus; inscription in a *tabula ansata*, very badly weathered.

[-----]
 [τ]ήν σωματοθήκην ἔαυ-
 τῷ καὶ τῇ γυνεὶ αὐτο[ῦ]
 [-----]
 5 [----- κατε]-
 [σκεύασ]εν.
 [ἄλλ]ω δὲ [οὐδεν]ι ἐξόν ἔστ[αι]
 [-----]
 [-----] ΠΡΟ . . ΧΛ! [- -]
 10 [-----] ἀποτε[σει] [- - -]

The *nahiye* of Kızılcadağ contains no ancient stones of any consequence. South of it for some 10 kilometres extends a fertile plain, on the western edge of which is the village of Kozağacı.¹ The fascinating site at Kozağacı was first described by Schönborn (reported in Ritter, *Erdkunde* xix. 851), and in more detail in *Reisen* ii. 172 ff. It was also visited by Heberdey and Kalinka, who published five more inscriptions (*Bericht* 9-10, nos. 28-32). Immediately behind the village the mountain rises precipitously for about 300 metres above the plain; down its face a torrent falls in a series of cascades. On the cliffs and the adjoining rocks are numerous rock-carvings, most of which are evidently of Hellenistic date. I give a list of those that I saw.

(a) On a boulder a little above the village, on the side facing the village, a rock-stele with relief showing a man reclining on a couch, on the foot of which a woman sits. (b) On the other side of the same boulder, three plain rock-stelae. (c) = Heberdey-Kalinka no. 32. Across the stream, in the mountain-face, two rock-stelae with inscriptions. (d) = *Reisen* no. 21. Just above the last, a relief showing a male and a female figure with inscription (PLATE 41d). (e) = *Reisen* no. 22. At the right of (d), a small figure in a panel with inscription. (f) = *Reisen* no. 5 = *CIG* 4381 A. A little beyond the last, two rock-stelae: that on the right has a wreath and no inscription, that on the left has a rosette and inscription near the bottom. A little farther up to the south are two more reliefs: (g) on the right, one male and two female figures, with illegible inscription in the pediment; (h) on the left, a male and a female figure; inscription on the rock below, very hard to read.

53. ΑΣΑΣ . ΑΙΑΛΙΚΡΗΣΛ . . . ΑΝΤ - - -
 ΑΥΤC Α Λ ΜΗ . . ΡΑ

We seem to have some something like: Α(β)ας(?) [κ]αὶ Ἀλικρης(?) Λ . . . αν τ[ὸν πατέρα] | αὐτῷ[ν καὶ - - -] μη[τέ]ρα.

(j) A few yards farther up, two pairs of rock-stelae, none inscribed; the lower pair have bucranium decoration, the upper left has a wreath, the upper right has two olive (?) branches pointing horizontally towards each other. (k) = *Reisen* no. 8 = *CIG* 4381 B. A good deal higher up, some 800 feet above the village, a fine group of five figures; inscription in the pediment over the middle pair. I give my copy of this inscription.

54. PTEIMA
 ΕΡΜΟΝΗΝΟΥ
 ΕΡΜΟΛΗΣΙΑΝΑΡΤΕΙ
 ΟΥ . ΕΝΔΛΙΒΟΥΜ . ΑΝΟΜΟΥ
 ΚΑΙΑ . . ΝΤ . . ΜΕ . ΕΡΑ

¹ Also called Tekke Kozağacı to distinguish it from the village of the same name one hour south of Bayır Köyü. Kozağacı is also the name of the site of Idebessus.

Combining the three copies we may read:

[Α]ρτειμα[ς]
 Ἑρμονηνου (?)
 Ἑρμολησίαν Ἀρτει-
 μου [Κ]ενδαιβου Μιανομου
 καὶ Ἀβαν τ[ῆ]ν μη[τέ]ρα

The name in l. 2 remains doubtful. Schönborn read ΕΡΜΟΛΗΘΙΟΥ: the copy in *Reisen* is unhelpful here. Ἑρμονηνης, Ἀρμουνανις and similar forms are attested. (*l*) = *Reisen* no. 10. Lower down to the left on the same rock-face, a single figure without inscription. (*m*) = *Reisen* no. 11. Opposite the last, on a large boulder, three figures, male in the middle, female at each



FIG. 3. KOZAGACI SANCTUARY. R = RELIEF

side, all three standing on pedestals. (*n*) = *Reisen* no. 11a. On a boulder immediately below the last, a single male figure. (*o*) On a boulder about 15 metres below (*n*), three figures, female in the middle, male at each side (PLATE 42a). (*p*) = *Reisen* no. 12. Across the dip from (*k*) and a little higher up, in a square panel, a full-size figure on the left, two very small figures on the right.

Higher up again, and apparently not previously visited, is a little valley through which the stream runs before falling over the cliff. Here are some pieces of terrace wall, several blocks with lions' paws, many uncut building-blocks, and abundant sherds of Roman and Byzantine date. On the steep slope of this valley on the north is a small rock-sanctuary of a horseman deity (Plan, FIG. 3). Four votive reliefs representing him are carved on the rock-face, most of them badly weathered; in three cases the horse is shown at a gallop (PLATE 41e), in one case at a walk (PLATE 42b); in all cases the rider's right hand is raised behind him and holds an object resembling a club; in all cases the horse proceeds towards the right. Certainly two, and probably all the reliefs carried inscriptions which are now illegible; the only word I could read was ΕΥΧΗΝ at the end of the one shown in PLATE 41e.¹ On the roughly levelled rock-surface below I counted sixteen sockets for stelae, but the stelae themselves have disappeared. Lying near the foot of the slope below is the following remarkable inscription:

55. Loose block 0.58 m. high, 0.89 m. wide, but the sides are not squared: the inscribed surface is imperfectly levelled, and the lines of writing are not horizontal. Irre-

gular letters varying from 15 to 35 mm. in height. PLATE 42d (squeeze).

ἐπὶ ἀρχιερέως Λικινίου Λόνγου
 Μαραμότης Τρωίλου δις γενόμενος
 ἐπιμελητὴς προστώου οἰκοδομῆς

¹ More, however, might perhaps be made of this inscription; the photograph shows quite a number of more or less isolated letters. I was most unfortunately obliged to leave without taking a squeeze.

καὶ λατομίας τῷ κυρίῳ Μασεὶ καταε-
 5 σκεοῦασα, εἰς ὃ προσωδιάσθην πα-
 ρὰ τῆς πεντακωμίας καὶ Τορλονγα-
 σω * ξ', καὶ Πτολομαῖος Λεοντίσκου
 * λεί· τὰ δὲ θυρώματα καὶ τὸ ἐμ-
 φάλωμα καὶ στῦλοι γ' ἐκ τῶν ἐμῶν
 ἀναλωμάτων

L. 1. The dating is by the high-priest of the Lycian League: the region of Kozağacı belonged in Imperial times to Balbura: see below on 59. Licinius Longus is well known from a number of Lycian inscriptions. Other documents dated by his priesthood are *IGR* iii. 706 (Cyaneae), *TAM* ii. 250 (near Sidyma), 905 vi. 35 (Rhodiapolis). He is also known as Lyciarch from *IGR* iii. 500 (Oenoanda). His priesthood is dated to A.D. 133 (*TAM* ii, 350, *IGR* iii. 706), his Lyciarchate to A.D. 127 (*IGR* iii. 500).¹ From the general quality of our inscription a Hadrianic date would hardly have been expected; once again we have a warning of the unreliability of this method of dating.

L. 2. The name Maramotes occurs at Termessus (*TAM* iii. 121, ἡ Μαραμότου φυλή).

L. 4. λατομίας, not 'quarry', but 'quarrying of stone' for the prostoön, as e.g. *IG* iv. 2, 102. 17, 40. The name Mases is perhaps known in Lycia;² but who is ὁ κύριος Μασης? Is he the deity whose sanctuary lies on the slope above? When I first saw the reliefs there I thought at once of Kakasbos, whose cult is so widespread in this district; the rider's attitude, and the club raised in the right hand, immediately suggest this. PLATE 42b in particular looks like Kakasbos. But the galloping horse in the other reliefs is not characteristic, and another equestrian deity may well come in question. If the penultimate word in PLATE 41e could be read, we should probably have the god's name; in this place, a little before εὐχὴν, I seemed to see, and the photograph seems to show, the letters AC: by coincidence these would suit equally [Κακ]ασ[βω] or [Μ]ασ[ει]. I hardly know what else Mases can be, other than a deity; but even so, he need not of course necessarily be the owner of the sanctuary close by.³

L. 5. προσωδιάσθην seems here to mean 'I was supplied with contributions'; elsewhere this verb means 'receive as income' (LSJ, s.v.). The passive would normally be used of the contributions themselves; but it hardly seems that προσωδιάσθην here can have been written for προσωδιάσθη.⁴

L. 6. For the pentacomia see 59 below. The letters ΤΟΡΛΟΝΓΑΣΩ are perfectly clear, and must, I suppose, be the genitive of a name Τορλονγασως. Why this man is thus coupled with the pentacomia is not obvious: did he perhaps make himself responsible for collecting the money? The sums in question seem small; apparently the prostoön, apart from Maramotes' own contributions, cost only 95 denaria.⁵

L. 8. The word ἐμφάλωμα is apparently new. Its meaning is hardly obvious. If it is from the Latin *falsus*, it might denote a false front, veneer or the like, but there seems no parallel for this.

¹ After Heberdey, *Opramoas* 69. The view perhaps more generally accepted is that the high priest and Lyciarch were identical, the former title being held during the term of office, the latter for life. See most recently J. A. O. Larsen, *Representative Government* (1955) 118-19, and for the contrary view Magie, *Roman Rule* (1950) 1388-9, n. 54.

² *TAM* ii. 650, 1125 (genit. Μασου): cf. Μασας 778, Μασα (genit.) 640. Μασας, genit. Μασαντος, is frequent at Termessus.

³ A prostoön on the steep slope in front of the sanctuary

seems hardly probable, though there are in fact some foundations just below the rock platform which have recently been dug up and the stones removed by the villagers. I took them at the time to be those of a terrace wall.

⁴ *Nu* is in fact often added to practically any part of the verb in Imperial inscriptions: so ἐγένετον, εἶναι, ἐξέστων, κατὰκτεν, &c.: but only, it appears, to avoid hiatus. See *Sardis* vii. 1. 154.

⁵ Cf. *JHS* lxxii (1952) 118, where a very considerable list of dedications amount in all to only 300 denaria.

Alternatively, may it be a variant form of ἐμφάρσωμα? φάρσος is glossed as *velamen*, and φάρσωμα is quoted as 'ship's timbers': ἐμφάρσωμα might perhaps be some kind of woodwork or panelling.

On the hillside higher up to the north-west are one or two simple graves in which sherds and beads are found. On a knoll some 300 metres to the north-east from the last, close above a fountain facing north, on an outcrop of rock, is a relief depicting a single figure standing with right hand raised and holding a club-like object in his uplifted left hand. Below is a four-line inscription, totally illegible. On the summit of this knoll are some rather rough rock-cuttings, and on the slope towards the village a large well-squared block, apparently fallen from above.

On the lower slopes of the mountain, around the village, are various other items of interest. (q) At the upper edge of the village, north of the watercourse, two rock-stelae plain and un-inscribed. (r) To the north-west of the village, on a low mound, are the remains of a building which may possibly be a small temple. (s) A little farther to the north is the so-called Hürlektaş, or Echoing Stone, a cleft in the rock which emits at times a loud murmur; it was not functioning when I visited it. (t) On another side of the same rock, facing the plain, is a badly weathered relief of which all that can be made out is two large humps occupying most of the space, and an indistinct object between them. Inscription below:

56.

Ζωίλος Ζήν[ω]νος
Αἰγυπτί[ο]υ Διο[σκό]ροις εὐχ[ή]ν

L. 2. No doubt Αἰγυπτί[ο]υ as a 'papponymic' is preferable to Αἰγύπτιο[ς], which is not normally used as an ethnic, as Egyptians called themselves by the name of their city.

The two humps are presumably the *pilai* of the Dioscuri; the object between them may have been the five-pointed star; but the form of the relief as a whole seems unusual. (u) On a small boulder west of the village is a representation of a thunderbolt. (v) At a spot called Tekmepınar just outside the village on the south, in a cornfield, is a large block of pink stone 1.70 m. high, 0.97 m. wide, 0.64 m. thick, with relief showing a standing male figure with right hand raised to his breast; a sword (?) seems to project beside his left leg. On either side is a pillar, and in the pediment above is a crescent. (w) A hundred yards south of this is a sarcophagus lid with recumbent lion of the usual type.

At Eski Mezarlık, fifteen minutes east of the village, are numerous ancient blocks including the dice-oracle published in *Reisen* ii. 174 (cf. Heberdey-Kalinka, *Bericht* 10).

57. Kozağacı, Eski Mezarlık, a round column 1.65 m. high, 0.39 m. in diameter, with flat flutes in the upper part, broken at the bottom; regular letters 22–25 mm. high, with ligatures.

Πρεῖμα ἡ μετανομασ-
θεῖσα Ἀρτέμεις ἡ καὶ
ἀναγραφείσα ὑπὸ ΝΑ
. ΙΑΣΕΙ\ΕΤΟΥ ἀνέστησε
5 τὸν κ[ύρι]ον ἀτῆς [πατ]έρρα
. . Ν . . ΑΚΛ [- - - - -]

L. 1. For the spelling cf. 55. l. 4.

L. 3. The final letters are uncertain: for NA either NEA in ligature, or even ΙΣΑ, might be read.

58. In the village I saw the dedication published by Heberdey and Kalinka, *Bericht* i, no. 29. The last line is there restored [τῇ μεγάλῃ θεῇ] εὐχὴν, but in front of the

omega a careful examination of the stone seemed to show the upper right-hand corner of a *pi*.

The name of this interesting site is given by the following inscription.

59. Kozagacı, in the village, standing upside down and partly buried, a rectangular base more than 1.16 m. high, 0.69 m. wide, 0.66 m. thick. Letters 48 mm. high in l. 1, decreasing to 30 mm. below. PLATE 42c (squeeze).

Αὐτοκράτορα
 Καίσαρα Λούκιον Σε-
 πτίμιον Σεουήρον Εὐ-
 σεβῆ Περτίνακα Σε-
 5 βαστὸν Ἀραβικὸν
 Ἀδιαβηνικὸν Παρ-
 θικὸν μέγιστον
 Τοριαειτῶν ἢ πεντα-
κωμία τῆς Βαλ-
 10 [β]ουρέων πόλε-
 ως

The name was evidently Toriaion or the like.

In lines 8-9 the letters underlined are written in an erasure. The original inscription ended with the word following Τοριαειτῶν ἢ: this was erased and the remainder of the inscription written in a different script. The *alpha* was added at the right in l. 8 to preserve the normal syllabic division. The original word may be probably restored from the inscription of Kozagacı published in Heberdey-Kalinka, *Bericht* i, no. 30, which ends with the words Βαλβουρεὺς τῆς κολωνίᾳ γειτοσύνης Πύρου ποταμοῦ.¹ The word κολωνία will exactly fill the erasure in our present inscription. The editors observe that the construction of these words is not altogether clear; I take them to mean 'a Balburan from the community on the river Pyrus adjoining the *colonia* (of Toriaion)'.

The reason for the alteration of our inscription was not of course a change in the status of the settlement, since the pentacomia was already in existence in the time of Hadrian: see 55 above. Presumably it was decided to make the dedication not in the name of Toriaion only, but of all the five villages.

Heberdey and Kalinka leave it undecided whether Balbura is the well-known city (or one of its *komai*), or a small place of the same name in the neighbourhood of Kozagacı. The new inscription leaves no doubt on this point: the word πόλεως is conclusive. We learn with certainty that this region belonged in the second century to the city of Balbura, whose territory was accordingly of considerable extent. The river Pyrus can hardly be other than the small stream which flows north across the plain into the lake of Söğüt. This plain affords ample accommodation for five villages; it supports in fact about double that number at the present day.

G. E. BEAN

¹ This stone now stands in the village outside the house of Raşit Kara. The reading is correct in every detail.

THE COURTS OF JUSTICE IN ARCHAIC CHIOS

(PLATE 43)

THE mutilated inscription generally called the 'Constitution of Chios' was first discovered in the village of Tholopotami and published in 1909 by Dr. Jacobsthal and Professor U. von Wilamowitz-Moellendorff. The examination of the stone and the photographs and squeezes were all made under very difficult conditions, and shortly afterwards the stone disappeared from sight and record. It found its way finally into the hands of the local authorities, and, Chios being then under Turkish rule, was sent to the Archaeological Museum at Istanbul, where it remained without attracting the notice of later travellers. The inscription has been included in several collections of Greek epigraphical texts, accompanied by the short commentaries of editors who were relying on the original description and readings. I examined the stone at Istanbul in 1949, and cannot suggest a full restoration of the text, any more than did the first editors in their short but admirably comprehensive account. But since this stone is a landmark in Greek constitutional history it is republished here, in order to note certain corrections in the text, and to air again those questions which must be considered before the document can be fully interpreted—namely, the date of the lettering, the order in which the four faces are to be read, and the meaning of certain terms used in the text.¹

Mus. Istanbul no. 1907 (FIG. 1, PLATE 43). Upper part of a stele of hard reddish trachyte, inscribed *boustrophedon* on all four sides. Found in 1907 near the village Tholopotami in the southern half of the island of Chios, built into the supporting wall of the modern road which goes from the main town (Chora) past Tholopotami southwards. Max. H. 0.74 m., W. 0.455 m. (misprinted as 0.765 m. in *NiS* 64), Th. 0.16 m. (upper), 0.17 m. (lower). L.H. 0.025–0.04 m. Interlinear space averages 0.01 m.

P. Jacobsthal and U. von Wilamowitz-Moellendorff, *Nordionische Steine* (1909) 64 ff., pl. 2 (= *NiS*); E. Nachmannson, *Eranos* xiii (1913) 91 ff. (notes made for his publication of the stone as no. 2 in *Historische Griechische Inschriften* (Kleine Texte 121 (1913) 9 f.); O. Hoffmann, *SGDI* iv (1914), ⁿ50; *DGE* 687; M. N. Tod, *GHP* ² 1.

The sides of the trachyte block are carefully smoothed, as far as its hard nature allowed. The top is also smoothed, the marks of a claw-chisel still visible. Somewhat off-centre on the top is a cutting 0.05 m. square and about 0.045 m. deep; a lead filling still lines it, with a hole through the centre of the lead as if for a spike on a finial of some kind. The cutting is 0.18 m. distant from side B, 0.22 from side D. It might be modern, but there seems no compelling reason to regard it so (see further below). The top of the narrow face D was badly scraped *before* it was inscribed; the lettering avoids the broken surface (PLATE 43*d*). One might guess that not more than half the stele is lost, because a total height of more than 1.5 m. would mean that the top letters were rather higher than the average eye-level; but the letters are quite large, and we cannot be sure that the mason would have worried about any minor inconvenience for his readers.

¹ The stone was re-examined in 1952 by Professor H. T. Wade-Gery, who with characteristic generosity placed his notes, new readings, and drawings at my disposal, discussed the text with me, and in fact laid the foundations for this article. It owes throughout far more to his suggestions and corrections than can be shown by specific footnotes, and I desire here to make grateful acknowledgement to him for all the help which I have received: also to Professor A. Andrewes, who has read and improved my text at many points. My thanks are due also to the Directors of the

Archaeological Museum at Istanbul for the photographs in PLATE 43. When this article was in galley-proof, I had the privilege of another discussion with Professor Wade-Gery, and was able therefrom to improve the text at several points. He is in no way responsible for such errors as remain. For his further comments on this inscription, particularly in connexion with the history of the archaic Attic courts, see his forthcoming article 'The Judicial Treaty with Phaselis and the History of the Athenian Courts'.

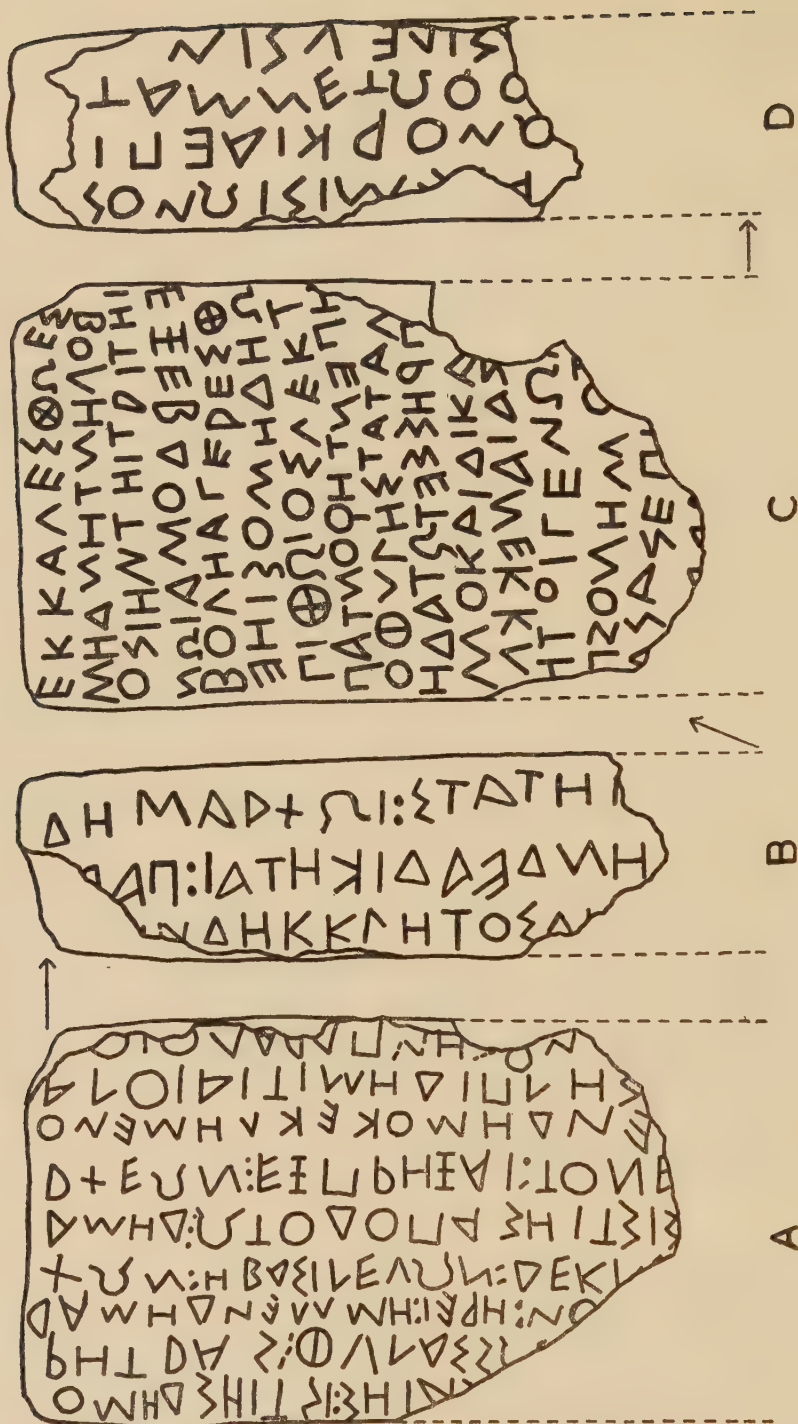


FIG. 1

The inscribed sides are here called A (wide side, vertical script), B (narrow side adjoining A on right), C (wide side, horizontal script), and D (narrow side adjoining C on right). The first editors noted certain minor differences between the lettering of the sides.¹ A and B show a double- or triple-dot punctuation, C and D have none. Moreover, on A and B all circles and curves were cut freehand with the chisel; on C and D the circles and some of the curves were made in the ungainly way which has been described in detail by S. Casson;² the mason first pricks out the outline with the point of his punch, and then joins up the holes with chisel-strokes. The lettering of B, C, and D is rather deeper cut than that of A.³ No marked distinction of letter-shapes separates the two sets. Indeed the shapes of many of the letters vary even on the same side (*alpha*, *lambda*, *mu*, *nu*, *omikron*, *rho*, *sigma*, *omega*); and one's impression is, as the first editors said, that the same man could have inscribed both sets, if for some reason he changed his technique half-way through. Certainly neither script looks appreciably earlier in date than the other.

The date suggested in *NiS* 65 was *c.* 600: 'ein Bruder der solonischen Gesetzespyramiden, eher älter als jünger.' The general impression of the script (it was argued) with its varying letter-forms was primitive, except for the open *eta*; and the upward taper of the stone defined it as a true *kurbis* ('genau ein κύρβις'), for which the κύρβεις ascribed by later writers to Solon seemed to offer a good parallel.

To call the stone a 'kurbis', as Wilamowitz did—and the name has stuck—is to rely on two unfounded premisses: (*a*) that a κύρβις means an inscribed stone with a strong taper upwards which makes it look something like a pyramid, and (*b*) that the Chian stone has such a look. The problem involved in (*a*) is irrelevant here,⁴ for if (*b*) is untrue the Chian stone has no connexion with that problem; and of (*b*) it need only be said that, as PLATE 43 shows, the stone is a stele of normal proportions; the taper is of 1 cm. only, on the narrow sides. It is not even a stout pillar like the stones from the Roman Forum and Prinias in Crete, monuments to which the title 'kurbis' has also been applied.⁵ If the cutting on top is original, the Chian stele must have carried an upper member of some kind, possibly a capping-stone with a projecting moulding, to shelter the lettering if the stele stood in the open; or it may conceivably have borne an anthemion, as did Ionic grave-stelai of the sixth century and later. Stelai of varying degrees of thickness, inscribed on three or all four sides (occasionally even over the top as well), were used throughout the archaic period and later; cf. the two cited above, and also the inscribed stelei from Kleonai, Tiryns, Sparta; for the fifth century, those from Athens, Miletos, Delphi.⁶

It is obvious that the Chian stele cannot be later than the sixth century, but there is no manifest reason for tying the date to the start of the century. It is true that archaic inscriptions from the Ionic Dodekapolis are still too few to justify any dogmatic assertions about the precise dates for the development of the letter-forms. But it is possible to make a rough estimate of the relative position of the Chian inscription in the series, if one assumes that the rate of development was

¹ *NiS* 65 f.: 'Ein Unterschied zwischen der Vorderseite [A] und rechten Schmalseite [B] und den beiden andern ist die Interpunktion. . . . Die andern beiden Seiten kennen sie nicht. Man kann also denken, daß diese später oder doch von anderer Hand geschrieben wären, zumal die Schrift etwas gleichförmiger wird. Aber tief gehen die Unterschiede nicht; es konnte auch derselbe Schreiber sich's bequemer machen.'

² *AJA* xxxix (1935) 514 ff.

³ It must be emphasized that FIG. 1 has been constructed for general guidance only, from a combination of squeezes and photographs. It does not profess to give an accurate picture of the chisel-strokes, but only to remind the reader

that C and D (and to a lesser degree B also) are cut more deeply than A. Where squeeze and photograph differed in the appearance of a letter, I have tried to follow the squeeze; but the numerous small cracks in the surface of the stone, and the transverse chisel-strokes which were used to smooth it, all helped to defeat accuracy.

⁴ I hope to discuss this problem more fully elsewhere.

⁵ 'Forum Stele': Diehl, *Inscr. Lat.* (1912) 1. Prinias: *IC* 1, xxviii 7.

⁶ Kleonai: *DGE* 129. Tiryns: *SEG* xi. 369. Sparta: *SEG* xi. 652. Athens: *IG* i.² 842. Miletos: Rehm, *Milet* i. 3, 376 f., no. 132. Delphi: *DGE* 323.

roughly the same in (e.g.) Chios, Miletos, Samos, and Ephesos. This conclusion is by no means certain, but at least the known inscriptions have not as yet suggested otherwise. The Chian inscription is cut *boustrophedon*, and uses open *eta*, crossed *theta*, and *qoppa*. The *boustrophedon* style and crossed *theta* still lingered in the second half of the sixth century, though neither was then common. I do not know of any east Ionic inscription using *qoppa* which is certainly later in style than the silver plaque from the Artemision at Ephesos; it is dated tentatively *c.* 550 or a little later, and, besides *qoppa*, uses open *eta* throughout.¹ Open *eta* is already in use on two early monuments from Samos: the statue of Hera (*c.* 570) and the group by Geneleos (*c.* 560–550).² On the other hand, closed *eta* is still used in two Milesian inscriptions from the Sacred Way at Didyma: on the stone lion dated *c.* 600 and on the seated statue by Eudemos (*c.* 575–550).³ It is also used by the east Greek mercenaries who wrote on the colossus at Abou Simbel *c.* 590.⁴ Thus the Chian stele could be as late as *c.* 550, and its use of open *eta* does not support an earlier dating than *c.* 570. I cannot suggest any other points about the lettering which might help us to a closer date. The eastern Ionic script throughout the greater part of the sixth century is noticeably less monumental than the contemporary script of the Greek mainland. The letters tend to be smaller, more irregular, less tailed, as though more hastily plotted and cut. One suspects that the use of hide and papyrus, in which Ionia must have been ahead of the mainland, encouraged a cursive script which influenced the masons.

Apart from epigraphical evidence, there is the certain reference to a stater or staters in the text (pp. 162, 164). E. S. G. Robinson in his momentous article on the coins and dumps found in the foundation-deposit of the Basis at the Ephesian Artemision and in a contemporary hoard on the site has shown conclusively that coinage was still in its infancy in the eastern Aegean states *c.* 600.⁵ Would deposits in lawsuits, or fines for the convicted, be already reckoned in staters at that date? It is certainly possible that the electrum stater was already reckoned as the normal unit of currency in secular matters, if fractions of staters were being put into a foundation-deposit by the pious at that time; but Chios is not Ephesos. The Ephesians were getting these dumps and coins mainly from the Lydians; but the connexion of Chios with Lydia was certainly not so close as that of Ephesos. This argument can hardly be pressed, however, for the stater(s) of the inscription might refer simply to a weight of bullion, not to a coin.⁶

We may therefore suggest a date *c.* 575–550 for the stone on epigraphical grounds. The next point to consider is whether there are any clues as to the order in which the four faces were to be read. It is easiest to state the conclusions on this point in the form of a series of assumptions. *Firstly* it is assumed that the inscription on the stone was originally a complete text; it did not run over on to another stele or stelai. That is unprovable, but in the absence of any contrary evidence it is permissible to work on this hypothesis at least until it fails us. *Secondly* it is assumed that the text starts on a wide face (A or C) rather than on a narrow. That also is unprovable, but it seems unlikely that a mason, faced with a blank stele, would start work on one of the narrow faces. Now, unless by some remarkable chance the inscription consisted of four separate texts which each exactly fitted one of the four sides, the inscription must at least once have run on from one side to another. So the *third* hypothesis is that in such a case the text will have run from one face to the next adjacent, in the way easiest for the reader to follow; it will not have leapt to a non-adjacent face. Since the scripts of A and B are dissimilar from those of C and D

¹ DGE 707. Some authorities have held that it originally formed part of the closed foundation-deposit under the Basis; but it was found beyond the Basis, in a disturbed area (Hogarth, *Excav. at Ephesus* (1908) 45 f.).

² Richter, *Archaic Greek Art* (1949) 103 ff.

³ Op. cit. 42 and 108.

⁴ GHI² 4.

⁵ JHS lxxi (1951) 156 ff.

⁶ This was pointed out to me by Professor Andrewes. W should then expect the metal to be specified (electrum, silver?), and indeed it may have been, for the text breaks off at that point.

TEXT

-
- A. 1 [- - -]κα: της Ιστιης δημο
 ←
- 2 ρητρας: φυλασσω[ν? - - -]
 3 [- - -]ον: ηρει: ημ μεν δημαρ-
 4 χων: η βασιλευων: δεκασ[θηι? - - -]
 5 [- - -? τη]ς Ιστιης αποδοτω: δημα-
 6 ρχεων: εξπρηξαι: τον εξεταστην? - - -]
 7 [- - -]εν δημο κεκλημενο
 8 αλοιαι τιμη διπλησ[ιη? - - -]
 9 [- - -]ν οσην παραλοιω[.]
- c. 3
- B. 1 [· · ·]ην δ' ηκκλητος δι[κη? - - -]
 2 [- - -]ην δε αδικηται: παρ_α
 3 δημαρχωι: στατηρ[ας? - - -]
-
- C. 1 εκκαλεσθω ες
 ←
- 2 βολην την δημ-
 3 οσην' τηι τριτηι
 4 εξ εβδομαιων
 5 βολη αγερεσθ-
 6 ω η δημοσιη ε-
 7 πιθωιος λεκτ-
 8 η πεντηροντ' απ-
 9 ο φυλης: τα τ' αλ[λ]-
 10 [α] πρησσετω τα δη-
 11 μο και δικα[ς ο]-
 12 [ρο]σαι αν εκκλ-
 13 ητοι γενων[τ]-
 14 [αι] το μηνος π-
 15 ασας επι[· · ·]
- c. 4 c. 3
- 16 [· · · ·] σ ε ε ρ[· · ·]
 — — —
-
- D. 1 [- - - Α]ρτεμισιωνος *vac.*
 →
- 2 [- - -]ων ορκια επι-
 ←
- 3 ταμνετω φω[μνυτω? - - -]
 4 [- - - β]ασιλευσιν *vac.*

- A: 1.]κα or]σα; the bottom of a vertical stroke is visible before the transverse one, suggesting κα, but may not be part of a letter.
 3. ημ μεν Wade-Gery for previous ημελεν.
 8. τιμη διπλησ for previous τιμαται πρησ.
 9. ν οσην παραλοιω for previous μος· ην γαρ αλci ο.
 ? παραδοτω Wade-Gery.

- B: 1. ην, δι for previous ηι, δ.
 2. The fragment with *alpha* has disappeared since it was first read.
 C: 10. πρησσετω for previous πρησσεν.
 D: 1. Α]ρτεμισιωνος Wade-Gery for previous Σμισιωνος.
 3. φω Wade-Gery for previous φο.

in certain details, it is assumed *fourthly* that C and D are consecutive (for, if the lost last line of C were written left to right, it could run straight on to the first line of D; see FIG. 1): and that A and B are likewise consecutive, the last line of A running on to the first of B. For if we trace the text on A to its last word *παράλοιψ*, the direct course thence is over on to the adjacent edge of B. B will then be read as it were from bottom to top (FIG. 1). This method is used occasionally in *boustrophedon* texts; it may be more convenient for the mason, and it makes no difference for the reader. There are examples from Phokis, Samos, and Crete.¹ We may note that on B the lowest line (that nearest to A) hugs the edge, whereas the top line straggles transversely up to the right, which suggests that the mason, showing the *horror vacui* common to masons in the archaic period, hugged the edge for his first line, kept his second line (the central) close to the first, and then, turning to start the third (the topmost), found too much space left, and so brought his line by degrees up to the edge as he went along. It seems less likely—though admittedly the point is debatable—that a mason, starting with the topmost line, would have set his first letters so far from the upper edge. (Wade-Gery reserves judgement on this view of the AB sequence.)

We read, then, from A on to B, and from C on to D. If the four sides bear a single, consecutive text, it must read ABCD; the sequence CDAB is impossible, because the final line of D ends in a *vacat* (PLATE 43). If AB and CD are separate texts, then C must start with an imperative in the third person singular with no expressed subject. This is awkward, and, moreover, B and C both mention a suit subject to appeal (*ἐκκλητος δίκη*). On the whole, therefore, I incline to think that the text is consecutive throughout, and that the mason changed his style of inscribing, or another took over the job, half-way through.

Translation: (A) '[---] of Istia, guarding the ordinances of the people [---|---]ON:HPEI. If while holding office as demarchos or basileus he ?accepts bribes [---|---] of Istia, let him pay while demarchos; the ?auditor is to exact [the fine, or himself incur it?---|---]EN when the people have been assembled). ??Assaults (*see below*, p. 163): a double fine [---|---?a fine] ?in amount the same as that from cases of assault. (B) ?If a suit subject to appeal [---|---], but if he has been wronged in the demarchos' court, [?let him deposit x] stater[s? --- and] (C) let him appeal to the council of the people. On the third day after the Hebdomaia let the council be assembled, the people's council, with power to inflict penalties, elected, fifty from each tribe. Let it conduct the other business of the people, and also let it [prepare? or judge?] all those cases which have been appealed against during the month [---|---] (D) of the month Artemision. [---] let him take solemn oath ?and swear [---|---] kings.'

Commentary

The two references to Hestia (Ion. Ἥστία) are obscure. She was worshipped in many Greek states as the ἑστία ἐν πρυτανείῳ, and so would be an appropriate deity to oversee the behaviour of those high officials who met in the Prytaneion.

The phrase δήμου ῥήτρως φυλάσσω[ν?] must refer to the duties of some official. At Athens the archaic (that is, pre-Ephialtic) council of the Areopagus was in a sense the guardian of the laws, as the later writers and politicians called it (Andoc. i. 87; *Ath. Pol.* 3, 6: 4, 4: 8, 4; Plut. *Solon* 19), in that it upheld the sanctity of the laws and conducted the trials of all those who attacked the constitution;² whereas the six Thesmothetai were the specific guardians: ὅπως ἀναγράφαντες τὰ θέσμια φυλάττωσι πρὸς τὴν τῶν ἀμφισβητούντων κρίσιν (*Ath. Pol.* 3, 4). Conceivably, then, this Chian official may be one of the members of the popular council de-

¹ Phokis: *DGE* 316. Samos: *DGE* 713. Crete (Dreros): Van Effenterre, *BCH* lxx (1946) 597 ff., 3.

² Cf. Hignett, *History of the Athenian Constitution* (1952) 90 f.

scribed on C. But since A goes on to deal with the duties of the high officials called demarchoi and basileis, it is perhaps more likely that he is one of these officials; possibly, indeed, this is part of the oath which such an official has to swear on taking up office.

The old word ῥήτρα (= law or ordinance) is attested chiefly in the Peloponnese, or Peloponnesian colonies.¹ It may be noted also that in the archaic script of Chios the sibilant —σσ— from κ₁, χ₁ is not spelt with the non-Greek letter T, as in certain other Ionic states (Kyzikos, Teos, Halikarnassos, Ephesos, Erythrai: *SGDI* 5522, 5632, 5726, ⁿ49 and ⁿ60).

In line 3 ηρει still defies explanation, though now rescued from the barbarous alternative ἡ ῥμελ(λ)εν, previously read as following it. Then comes a protasis: 'if, while holding office as demarchos or basileus . . .'. I have restored here the aorist passive of δεκάζειν 'to bribe', because it appears from lines 5–6 that the demarchos has thereafter to pay something, which is presumably a fine because another official has to exact it. He must pay it before his term of office ceases; whether in fact he was evicted from office as well as being fined (as one tends to take for granted), we do not know; but the use of the present participle (δημαρχέων) seems to hint that he was not. The traditional oath sworn by the Athenian archons on entering office bound them, if they took bribes, to dedicate a golden image as fine (*Ath. Pol.* 7, 1 and 55, 3), but eviction from office is not actually specified there either; and Hesiod attests that bribe-swallowing was quite blatant among the rulers of Boeotia.

The fine at Chios may have been paid [τωι ιερει τη]ς Ιστιης (so Nachmannson, 95), or [χ στατηρος ιερος τη]ς Ιστιης.² For the official who had to exact it, I have suggested ε[ξεταστην] following the inscription from Erythrai *DGE* 702, 13 ff. (early fourth century): εκπρηξασθων | δε οι εξετασται η αυτοι οφειλ|οντων αρχεν δε τουτοις μηνα Αρτεμισιωνα επ' ιροποιο Ποσεος. But there is no evidence for an official auditor in Chios at this early period; and one might restore alternatively: ε[πιστατην], recalling that at Samos in the sixth century there was an official who exacted Hera's quota κατὰ τὴν ἐπίστασιν from revenues received (in this instance, in the form of booty: *GHI*² 7). Very probably the Chian law continued in the usual formula ἡ αὐτὸν ὀφείλειν, as in the Erythraean decree quoted above, and many others (cf., for example, *DGE* 800, *SGDI* 5314, &c.). Lines 7–9 bristle with difficulties. The demos here summoned is, I think, the full citizen-body in assembly, rather than the βουλή δημοσίη (so *NiS*, 67). In line 8 αλοι was previously taken as the short-vowel aorist subjunctive of ἐάλων, a form found also in an inscription of the early fourth century from Eretria (if the copy is accurate: *IG* xii. 9, 90, 10–11): αποτινειν εαμ μεν κειρω[ν] | η φερων αλοι εκατον δραχμας κτλ. The following αἱ had then to be explained as an Aeolicism. Since Wade-Gery's restoration of ἡμ μέν in line 3—i.e. the normal Ionic usage—it is hard to believe that the inscription varied between αἱ and ἡν, and, in view of the new reading τιμη διπλησ[, I have suggested the following possibility, though admittedly as a counsel of despair: to read αλοιαι as feminine plural of an (otherwise unknown) noun ἄλοιή from the same root as the verb ἄλοάω (epic ἄλοιάω); to assume that here we pass to a fresh legal point, and to translate it as a sort of heading: 'Cases of assault: the fine to be double . . .'. We then pick up the noun again in line 9. Wade-Gery has, however, made the attractive suggestion that one should read here: [- - - ημ μ]εν δημο κεκλημενο αλοι, αι τιμη διπλησ[ιη - - -] 'if in the Assembly he is convicted, the fine is to be double . . .'; he points out that the *eta* in τιμη is both wider and more deeply cut than are other examples of the letter on this face, and may show beneath it the traces of an erased *alpha* (cf. Wilamowitz' reading τιμῶται here); i.e. the mason cut αι τιμα— and then corrected the noun to the singular, but

¹ Sparta, Taras, Herakleia, Elis. Cf. Busolt-Swoboda, *Griech. Staatskunde* (= BS) i. 43 and 456; Wade-Gery, *CQ* 1944, 1 ff., 115 ff.

² I owe this suggestion to W. G. Forrest, who cites as parallel *SIG*² 987, line 35 (4th cent. B.C.).

omitted to alter the article to match. I did not myself observe the traces of another letter beneath, but the roughness of the stone here makes proof either way impossible. On Wade-Gery's interpretation, then, the Assembly is hearing an appeal by a dissatisfied litigant, and a lost appeal means the doubling of the penalty.

In the following line (B1) mention is made of appeal from a verdict, ἐκκλητος δι[κη] (or, less likely, of a person ἐκκλητος, i.e. chosen to be arbitrator of a case (*NiS*, 69)); and then, after a break, we have perhaps the details for the lodging of an appeal: 'if a man has been wronged' in the court of the demarchos . . .', followed by a reference to a stater or staters, which may be a deposit which the appellant must put down if he wishes to make appeal from this court of the first instance. It is possible that (as I had thought, and am still reluctant to dismiss the possibility) the Council is itself the Court of Appeal; but Wade-Gery argues convincingly that the Council is here exerting probouleutic power only (cf. τὰ τ' ἄλλα πρησσέτω τὰ δῆμον, lines 9-11): that it will re-hear the case, to prepare it for a final hearing and verdict by the Assembly.

It appears that in Chios in the sixth century justice was administered, as at Athens, by the chief magistrates. In Athens the verdicts given in the magistrates' courts were not final; according to the Atthis, Solon introduced a measure which the Atthidographers described as the right of appeal to the ekklesia (heliaia) from the verdicts of the ἀρχαί (*Ath. Pol.* 9, 1; *Plut. Solon* 18). The right of indiscriminate appeal from any judgement would obviously weaken the authority of the magistrates undesirably, and modern commentators conclude either that this right of appeal was hedged about by heavy penalties in case of failure,² or that it meant appeal not against the actual conviction, but against the amount of the penalty imposed; the magistrate had authority to inflict a maximum laid down for him by law, and if he exceeded this then his verdict could be rejected (or endorsed) by the verdict of the citizens.³ The Chian law is too fragmentary to reveal clearly whether here appeal was allowed against the conviction or only against the amount of penalty imposed; but the fragmentary clause in B: ἦν δε ἀδικηται κτλ. suggests an appeal against the conviction.

The office of δῆμαρχος is attested chiefly among Ionic states. It existed at Eretria (*IG* xii. 9, 90; 139; 189) and at Neapolis, where it was apparently the eponymous office, for Strabo speaks of the list of names of the demarchoi, in which as time went on native Campanian names might be seen among the Greek (Strabo 246). It may be inferred also that there were demarchoi at Kyme, mother of Neapolis and daughter of Eretria and Chalkis. The demarchoi in Attica, of whom we have very little information that antedates the fourth century, were the chief secular authorities of the demes, holding an annual office which corresponded roughly, in the microcosm of the deme, with the office of Archon in the macrocosm of the Athenian state.⁴ Did the title mean originally the secular leader of the citizen-body (δῆμος) after the deposition of the king, and should we then equate the demarchos at Chios with the highest magistrate of other states—the prytanis, the archon, the aisymnetes, the kosmos, and their like? Or does the word itself imply that this office was originally created in certain states to support the cause of the common people against the power of the oligarchic ἀρχαί?⁵ The same problem of interpretation overhangs the title of δημιουργός, a high office which is attested in many states, chiefly Doric or at least non-Ionic (Argos, Mycenae, Elis, Mantinea, Alea, Thera and Kyrene, Delphi,

¹ LSJ cites Antiphon iv. 4, 9 and Plato, *Rep.* 359a for instances of ἀδικεῖσθαι used, as here, in the present tense but with the meaning of the perfect. The passage of Antiphon best illustrates it: τὸν τε γὰρ διώκοντα οὐ δίκαιον καταλαβάνειν, μὴ σαφῶς διδάξαντα ὅτι ἀδικεῖται: 'For it is not just that the accuser should seek to arrest (the accused), unless he has shown clearly that he is the victim

of wrong.'

² Bonner and Smith, *Administration of Justice* i (1930) 177 ff.

³ Wilamowitz, *Athen u. Aristoteles* i. 60; Hignett, *op. cit.* 97 f.

⁴ BS ii. 966 ff.

⁵ BS i. 352.

Petelia, Chaleion? (Galaxidi), Corinth).¹ Hesychius defines the magistrate δημιουργός as παρὰ τοῖς Δωριεῦσιν οἱ ἄρχοντες, τὰ δημόσια πράττοντες, ὥσπερ Ἀθήνησιν οἱ δήμαρχοι: and it has indeed been suggested² that the titles are merely the Ionic and Doric versions of the same office; but this solution is too tidy; Doric Kos had a demarchos (*Inscr. Cos* 344) and Ionic Samos a demiourgos (*SGDI* 5702).

This Chian demarchos evidently dispensed justice, and inasmuch as appeal could be made against his decisions to the people by way of a Council elected from the citizens without even a mention of the word ἀριστίνδην, it does not sound as though the office of demarchos, in Chios at least, could have been created specifically to support the rights of the people.

The college of basileis is a more familiar institution. As Busolt points out,³ such a collegium appears already in the *Odyssey* (viii. 391); in Phaiakia is a supreme basileus Alkinoos, with a council formed of the twelve most important basileis in the country. At Athens the four phylobasileis combined in the Prytaneion under the presidency of the Basileus to judge certain homicide cases involving religious matters.⁴ At Mytilene one of the laws ascribed to Pittakos decreed that trials concerning questions of property should be held before the Basilaes and the Protanis (Theoph. *ap. Stob. Flor.* 44, 22; see also *IG* xii. 2. 6, 18, 74). At Elis an inscription of the sixth century connects a college of basileis with 'the highest magistracy' (*DGE* 409): αἱ δὲ μέπιθειαν τὰ ζικαῖα ὀρ μέγιστον τέλος εχοῖ καὶ τοὶ βασιλαεῖς, ζεκά μναις κα ἀποτινοὶ φεκάστος κτλ. The title is found also at Megara and her colonies (*DGE* 153-6, 163, 169-70), Miletos (*DGE* 631A, 725-6), Kos (*DGE* 251), Nasos (*IG* xii. 2. 646), Kyme (Plut. *QG* 2), Kyzikos (*AM* xxvi (1891) 438), Ephesos (Strabo 633), Skepsis (Strabo 607), and has been suspected at Mantinea.⁵ The Chian office of Basileus is mentioned again in an inscription of the fifth century (*DGE* 688), which states that the basileus, when he duly pronounces the official curses, shall include in them anyone who has defied the ruling of the State on the public sale of certain properties: [ο]ς ἀν τὰς πρησις ἀκρατεᾶ[ς] | ποιηῖ, ἐπαρᾶσθω κατ' αὐτ[ο] | ο βασιλεος, ἐπὴν τὰς νομ[α]ίας ἐπαρᾶς ποιηταί: and in a slightly later Chian inscription (*DGE* 693) information is to be laid πρὸς τοὺς βασιλέας. It is evident therefore that in Chios as elsewhere there was a body of basileis holding office together, and possible that, as at Athens, they were composed of the basileus proper and x phylobasileis.

It has been taken for granted hitherto by all editors that C starts in the middle of a statement, with the apodosis of a conditional sentence whose protasis must have appeared in the lost part of one of the other sides. This is indeed very likely, especially if we assume that the lost protasis was contained in the last two mutilated lines of B, which seem to bear that general sense. The lettering, rather shallow on A, becomes more deeply cut on B, as on C. But otherwise there is a real difference between B and C (p. 159). It is easy to think of reasons that could account for the change, but the remote possibility cannot be excluded that the different script of C does betoken a new sentence, not the continuation of a previous line. C would then be a separate law, defining the composition and duties of the body to which appeals are to be directed. Suppression of the subject is found occasionally in archaic inscriptions, though, as far as I know, only with the imperatival infinitive.⁶

¹ Argos: *SEG* xi. 314, 336. Mycenae: *DGE* 98. Elis: *Ol.* v. 11. Mantinea: Thuc. v. 47. Alea: *DGE* 654. Thera: *IG* xii. 4, 350. Kyrene: *SEG* ix. 11-44. Delphi: *DGE* 323. Petelia: *IG* xiv. 636. Chaleion (?): *IG* ix. 1, 333, 335 (the site is there identified as Oianthea; but see now Lerat, *Les Locriens de l'Ouest* i (1952) 198 ff. Corinth: Thuc. i. 56. 2 (ἐπιδημιουργοὶ τοῖς Ποτῖδαϊα).

² *NiS* 67; *BS* ii. 351 ff.

³ *BS* i. 352.

⁴ Hignett, *op. cit.* 76, 311 ff.

⁵ A. A. I. Waisglass, *AJP* lxxvii (1956) 167 ff.

⁶ e.g. *GHI*² 34: τὸν ξένον μὴ ἀγῖν ἐ' τὰς Χαλκιδεὺς τὸν Οἰανθεᾶ κτλ.: 'No one is to carry off the Oianthean stranger from Chaleian territory, etc.' Cf. Meisterhans, *Grammatik d. Att. Insch.*³ 79.

As previous commentators have observed, the insistence on the qualifying phrase ἡ δημοσίη implies that another βουλή already existed in Chios at the time, which can hardly have been other than the type of archaic council proper to oligarchies, that is, the council of elders confined to those of the ruling circle.

The Chian popular council is to meet monthly on a fixed day, the ninth (i.e. the third (counted inclusively) after the Hebdomaia, the festival to Apollo which occurred on the seventh of every month). It is ἐπιθώιος, that is, it has power to inflict penalties, θωήν ἐπιτιθέναι. This seems to be a more likely meaning for this ἄπαξ λεγόμενον than the passive rendering 'subject to penalty', especially if it should be itself the Court of Appeal; it must be granted the power to inflict penalties as it sees fit, without being itself subject to any higher authority. If ἐπιθώιος is passive in meaning, it could only signify (as it is translated in LSJ, s.v.) 'under penalty of a fine for non-attendance'. Such a penalty is cited by Aristotle in *Pol.* 1297a as characteristic of oligarchic constitutions, and occurs in the two Constitutions of *Ath. Pol.* 4 and 30, generally held to be products of the end of the fifth century. But one would certainly expect the Chian law, in this case, to specify for what the councillors are to be penalized, and the amount of the fine.

How large was this council? We do not know the number of the tribes in early Chios. There may have been four, as at Athens and in some other Ionic states:¹ or three, as has been inferred for Erythrai, Chios' neighbour on the mainland.² In the fifth century Chios had a body of officials called the πεντεκαίδεκα (=3×5), who were ultimately responsible for the exaction of fines (*DGE* 688). A council of 150 sounds a reasonable number for Chios in the first half of the sixth century; but this is pure conjecture.

Side D, which may continue the text from C, has a first line ending in a full stop with the name of the month Artemision. This month was apparently last in the Ionic calendar of Miletos, coinciding in time with the month Mounichion in the Attic calendar.³ It is impossible to tell whether the actual date on which the law became valid was here given, as in later decrees (cf. *DGE* 702 quoted above, p. 163, and *SIG*³ 45, from Halikarnassos)—or whether there was here a reference to some sacrifice to be made on such-and-such a day μηνὸς Ἀρτεμισιῶνος. After the *vacat* at the end of line 1, a new sentence starts, again from left to right, to mark a fresh start. Somebody is to take oath to observe a covenant made. The subject of the verb ἐπιταμνέτω may be the councillor, for if this council was to act as a judicial body, its members must have had to take oath before assuming this office, as other judges did. Perhaps the formula which they were called upon to use was the same as that for other judges, and we might restore, for example, ῥῶ[μνύτω τὸν αὐτὸν ὄρκον τῷ δημαρχῷ καὶ τοῖς βα]σιλεῦσιν (cf. *DGE* 701, lines 19–20: ὁμοσάντας τὸν αὐτὸν ὄρκον τῇ βολῇ, κτλ.).

The general sense of the document, read as ABCD, may be summed up as follows, with a due *caveat* against all that is still highly conjectural in it: (1) the judicial duties of certain high magistrates are defined, *perhaps* including an oath which reminds them of their duty as guardians of the law of the citizens; (2) penalties are specified, if they (a) take bribes or ? (b) inflict bodily harm on the person standing trial; (3) in certain circumstances their verdicts may be appealed against; (4) the court hearing appeals is to be the δῆμος, or a council elected from it which has other duties undefined here; (5) the councillors, before hearing appeals, are to swear an oath like that sworn by the judges themselves.

I refrain from doing more than mention here the vexed point as to whether this Chian text, with its (implied) two councils, offers good support for the statement of the Atthidographers

¹ BS i. 120.

² Gaebler *Erythrae* 115, 118; Szanto, *SbAkWien*, 1901, 60f.

³ See *SIG*³ 577 (not. ad loc.) and Rehm, *Milet* i. 3 (1914) 231 ff.

that Solon created a second Council from the four tribes at Athens in the early sixth century.¹ The certain point on which all are agreed is the importance of this inscription as one of the foundation-stones of ancient Greek democracy. A council of the people is given power, in certain circumstances, to override the decisions of the highest magistrates of the state, and the basic right of the individual citizen to be fairly treated is thereby vindicated.

One minor point should not, however, be forgotten. We do not know what was the penalty for losing one's appeal: merely forfeit of the deposit, or a severer punishment? If we accept Wade-Gery's interpretation of A7-8 (p. 163), it was, at least in some circumstances, the doubling of the original penalty. Did the parts of the text now lost include any still stronger deterrents? It will be recalled that even the rigid code of Zaleukos offered a rudimentary right of appeal (Polyb. xii. 16). If a man maintained that he had been wronged by a magistrate's misinterpretation of the code, he could state his case against the magistrate before the Thousand, the oligarchic assembly of Lokroi. But if he lost his case, the penalty was death by hanging.

L. H. JEFFERY

¹ In my view, it does offer strong support. Cf. Andrewes, *Probouleusis* (1955) 21 f. and (contra) Hignett, op. cit. 92 ff.

PREHISTORIC LACONIA: A NOTE

THIS paper contains a brief summary of the results of researches into the prehistory of Laconia which were conducted mainly during the years 1936-9. It is greatly regretted that a series of varied but compelling impediments has hitherto delayed a proper publication; this, however, will follow as soon as possible.

The map, FIG. 1, is taken from sheet G 13, Kalamai, of the 1/250,000 series dated June 1944. The chronological table lists the sites alphabetically under six regions. The nature of the evidence for each entry is briefly noted, entries without source reference being based on autopsy. Literary sources for the history of pre-Dorian Laconia will not be discussed here.

Except for Zarnata, the Neolithic sites are in or near the Eurotas valley. Their pottery and figurines are of mainland type, and their settlers presumably came by land. Asea and Hageorgitika are the nearest kindred sites.

Some at least of the people who introduced the E.H. culture probably came to Laconia by sea—settlers in Kynouria, for example, are unlikely to have come over Parnon. E.H. sites are both numerous and widely diffused. Few have been dug, and surface finds of pottery are usually so worn that shape rather than decoration has had to be the criterion; thus, little patterned E.H. ware has been found in Laconia, but this need not imply that it was not made and used.

M.H. sites are fewer and, except perhaps in the lower Eurotas valley, continue existing E.H. settlements. Minyan is the distinguishing ware, both grey and black, though there is good matt-painted from Amyklai, Geraki, and Apidia, and polychrome light-on-dark from Skala and Gangania.

The only previously unrecorded L.H. I and II sites are Palaiopyrgi (above Vaphio), Apidia, and Daimonia, but it should be briefly mentioned that at Palaiokhori, twenty-two vases from which have been known and in Athens since 1925 (N.M. 6261-82), there are elliptical tholoi like those at Thorikos, and there must have been a considerable settlement near by, dating from at least L.H. II. An L.H. I or II settlement near Stefania must also be postulated even by those who do not accept Evans's M.M. IIIB date for the blocks of Krokeai porphyry at Knossos,¹ since there is at least one L.M. I object, a sealstone,² made of the stone, and a bowl-fragment, presumably L.H. II, from the Vaphio tomb.

L.H. III, in Laconia as elsewhere, is a period of widely diffused settlement. The pottery from the tombs excavated by Karakhalios at Pellana (Kalyvia) is dated by Furumark³ to L.H. IIIA2, that from the Menelaion⁴ to L.H. IIIA and L.H. IIIB, but surface pottery from most other sites is too worn for comparable precision. The four vases from Vaskina (a tall-stemmed kylix, a stirrup-jar, a small globular jug, and a small plain jar) are good L.H. IIIB, as is also a kylix dug out by me from the Συκώκης tomb at Palaiokhori and now in the National Museum. I know of no Close Style or Granary class pottery from Laconia.

¹ PM iii. 269 f.; iv. 467, 898.

² PM iii. 270.

³ *The Chronology of Mycenaean Pottery* 63.

⁴ *Ibid.* 70; *Analysis and Classification* 540.



FIG. 1. PREHISTORIC SITES OF LACONIA

Chronological table

Sites marked * are not shown on the map, FIG. 1, as their exact positions are not known to me. For their approximate positions, see references in notes.

SITE	NEOLITHIC	E.H.	M.H.	L.H. I AND II	L.H. III
<i>Eurotas valley</i>					
Amyklai ¹	..	Settlement	Pottery	..	Pottery, tombs, figurines
A. Vasilios	..	Sherds	Sherds	..	Sherds, celt
Geraki ²	? Sherds	Sherds	Sherds, graves	..	Walls, figurines
*Koufovouno ³	Sherds, celts	Sherds, celts	..	..	..
Menelaion ⁴	..	..	..	Houses, pottery	Houses, pottery
Palaioipyrgi	..	Sherds	..	Sherds	Sherds, celt
Sparta ⁵	Stone vases and figurines	..	..	..	Sherds
Vaphio ⁶	..	..	..	Tholos and contents	..
<i>Lower Eurotas valley</i>					
Helos ⁷	..	..	..	..	Celt
Skala	..	..	Sherds	..	Sherds
Stefania (Krokeai) ⁸	..	..	..	Settlement for quarrying <i>Lapis Lacedaemonius</i>	
Zasi (Trinasos) ⁹	..	..	..	..	Chamber tomb and contents
<i>Malea Peninsula and Kythera</i>					
Apidia	Sherds	Sherds	Sherds	Sherds	Sherds
A. Ioannis	..	Sherds, celt	..	..	..
Daimonia ¹⁰	..	..	Pithos grave	Sherds	Sherds
Elafonisi	..	Sherds, OBSIDIAN	..	..	..
Gangania	..	Sherds	Sherds	..	Sherds, celt
Kythera ¹¹	..	Marble jug	Sherds, stone vases	Tomb, pottery	Pottery
Monemvasia ¹²	..	..	..	..	Sherds, celt
Palaiokastros Vatika ¹³	..	..	..	..	Beads, ring, and seals in Ashmolean
Plitra	..	Sherds	Sherds	..	Sherds
<i>Mani</i>					
Gythion (Kranai)	..	..	..	..	Sherds
Kambos ¹⁴	..	..	..	Tholos and contents	Some objects from tholos
Las	..	..	..	..	Walls, sherds

¹ Amyklai: E.H., M.H., *AM* 1918, 117 ff.; 1927, 1 ff.; L.H. III, *EA* 1892, 1 ff.

² Geraki: all periods, *BSA* xi. 94 f.; xvi. 72 ff.

³ Koufovouno: both periods, *AA* 1942, 156.

⁴ Menelaion: both periods, *BSA* xv. 113 f.; xvi. 4 ff.

⁵ Sparta: Neolithic, *AM* xvi. 52, Athens N.M. 3929-31, 3949, 3979; L.H. III, *BSA* xxviii. 38. I thank Mr. Cuttle for this reference.

⁶ Vaphio: *EA* 1889, 136 ff.

⁷ Helos: *BSA* xv. 161. As the main reason for thinking there is a site at Helos is literary rather than archaeological I have suggested L.H. III as the date for this celt.

⁸ Stefania: Professor Blegen tells me he found Mycenaean sherds on a low hill seawards from the village. Objects made of the porphyry have been found at many L.H. and L.M. sites, notably Mycenae and Ialysos (a list will be given in the main paper).

⁹ Zasi: unpublished tomb excavated by Th. Karakhalios, the pottery from which is in the Sparta Museum. Two vases published by Mackeprang in *AJA* xlii (1938), pl. 21. Furumark, who refers to the site as 'Geraki', dates the vases L.H. IIIA2-III B.

¹⁰ Daimonia: M.H., *BSA* xiv. 166.

¹¹ Kythera: E.M. or E.C. jug, *AM* xvi. 52; M.H., *ADelt* i (1915) 192; *JHS* xvii. 349 f.; *BSA* xxxii. 245 f.; L.H. II, *ADelt*, loc. cit.; L.H. III, *BSA*, loc. cit.

¹² Monemvasia: Professor Blegen found L.H. sherds at a site near the old village. There is also a small celt of brown stone in Athens, N.M. 4030.

¹³ Palaiokastros: this was given as the provenience of a group of two seals, a ring, and four beads, purchased by Sir Arthur Evans and given to the Ashmolean Museum. They are made of greenish stone and are of Hittite type.

¹⁴ Kambos: L.H. II and III, *EA* 1891, 189 ff.

SITE	NEOLITHIC	E.H.	M.H.	L.H. I AND II	L.H. III
<i>Mani</i> (cont.)					
Leftro ¹	..	..	..	..	Sherds
Mavrinitza ²	..	..	..	Gold cups, &c.	..
Thalamai (Koutifari) ³	..	..	..	..	Pottery, celt
Zarnata (cave) ⁴	Pottery	..	..	..	..
<i>Taygetos</i>					
Arkines ⁵	..	..	..	..	Tholoi and contents
Belmina	..	..	..	..	Obsidian
Pellana (Kalyvia) ⁶	..	..	..	..	Chamber tombs and contents
<i>Parnon and Kynouria</i>					
*Analepsis ⁷	..	Celts	..	Tholos and pottery	..
Leonidi Skala	..	..	..	..	Sherds, obsidian
Palaiokhori ⁸	..	Sherds, celts	..	Tholoi and vases	Tombs, pottery
Tyros	..	Sherds	..	..	..
Vaskina	..	..	..	..	Tombs, pottery
*Vourvoura (Kharadra) ⁹	..	..	..	..	Celts, sherd

¹ Leftro: L.H. III sherds were found here by N. Valmin, *Études topographiques sur la Messénie ancienne* 203.

² Mavrinitza: *AJA* 1938, 304-5. The objects are in Athens and not yet published.

³ Thalamai: L.H. III, *BSA* xi. 124 f.

⁴ Zarnata: Neolithic, *AA* 1935, 203 ff.

⁵ Arkines: L.H. III, *EA* 1889, 132.

⁶ Pellana (Kalyvia): *ADelt* x (1926), *parart.* 41 ff.

⁷ Analepsis: E.H., *EA* 1901, pl. v. 5; L.H. II, *JHS* lxxv, suppl., Archaeological Reports, 10.

⁸ Palaiokhori: L.H. II, *ADelt* ix (1922-5), *parart.* 18 f., figs. 1-5. Furumark dates these variously L.H. IIA, L.H. IIB, and L.H. IIIA, suggesting (*Analysis and Classification* 485 n.) that two of the earliest, cups, may be Cretan imports.

⁹ Vourvoura (Kharadra): Romaïos, *PAE* 1950, 234 ff.

HELEN WATERHOUSE

THE DEME IKARION

FIRST, thanks to two kindly critics, some modifications have to be made in my discussion of Attic neuter plural demes (*BSA* 1 (1955) 13). I should have quoted Steph. Byz. s.v. Στεριά . . . θηλυκῶς καὶ οὐδ'ετέρως to illustrate the possibility of doubt between feminine singular and neuter plural. Note that the form Στεριάνδε given in Meineke's text is an emendation for the MS. Στεριάδε. This last is clearly wrong, but Στεριάδε is at least as possible an emendation. The other two τοπικά, Στεριᾶθεν and Στεριοῖ, point different ways. Since we do not know where Stephanus found them, nothing useful can be said.

To come to misstatements, Professor W. Wallace points out to me that my Attic narrow-mindedness had allowed me to forget that he had proved that there was no such Eretrian deme as Αἰγίλια and that the emended text of Hdt. vi. 101 on which I relied must be differently emended (*Hesperia* xvi (1947) 130, 132-3). This leaves in Attica Αἰγυλιόθεν (*IG* ii.² 5376) and the forms in Steph. Byz. of which Αἰγυλιᾶθεν and Αἰγυλιοῖ are certain. No one will wish to extract certainty from the MS. variants of the third form, Αἰγυλιάνδε, Αἰγυλιᾶδε and Αἰγυλιᾶδε. There is of course no excuse for my having given Αἰγυλιάδε (whatever form that would be) as certain. The position is much the same as with Στερία, except that the possibility of a neuter plural form is even greater, since we have the epigraphically attested Αἰγυλιόθεν.

My most serious mistake, as Mr. M. N. Tod points out, was to quote Pausanias i. 2. 5 as evidence for a neuter form Ἰκάριον: ἐπὶ Ἰκαρίου there clearly means 'in the time of Ikarios'. But the evidence of Athenaeus 40B, Suidas s.vv. Θέσπις, Μάγνης remains valid for a neuter singular form, and it is from this that Ἰκαριοῖ and Ἰκαριόθεν derive. Indeed, the only evidence for Ἰκαρία seems to be Stephanus's lemma, for his Ἰκαρίαζε seems most likely to be a wrong formation from a neuter plural Ἰκαρία. It is clear from all this that Wilamowitz would more safely have restored Ἰκα[ριοῖ] in i.² 187.3 as the attested form, and Mr. Tod now suggests this.

How many demes are there, whether Ikaria or Ikarion? The original tribe-affiliation of the deme is certainly to Aigeis (cf., for example, ii.² 1749). It is later found in Antigonis (cf. ii.² 912), and seems to have passed to Attalis after the dissolution of Antigonis (cf. W. K. Pritchett, *The Five Attic Tribes after Kleisthenes* 34). Besides the Antigonid-Attalid deme, a second deme, Ikaria B, attached to Ptolemais, has had a persistent existence in our authorities on deme-distribution. Pritchett, in his first collection of the evidence (op. cit. 25, 30), rested its existence on three passages, ii.² 2107. 24, 2442. 5, and 2362. 53, where he read and restored [Ἰκα]ρία under the list of demes of Ptolemais in 200 B.C. His new and careful revision of ii.² 2362 in *TAPA* lxxxv (1954) 159 ff. reduces line 53 to a *rho* and a very doubtful *iota*, and he reads [Ἰκα]ρί[α]. At the same time he points out that 2107. 24 is no longer evidence for the affiliation of Ikaria, since Mitsos (*BCH* lxxiii (1949) 356) has corrected Ἰκα(ριεύς) to Ἐκα(ληθεν), and that the evidence is now confined to 2362. 53 and 2442. 5. It may be well to note that the belief that ii.² 2442 may be a list in tribal order is not a certain one, that the stone is lost, and that the present reading [Ἰκα]ρ[ι]εύς is an emendation of Fourmont's Ταρσεύς, made by Koehler in the belief that Ikaria belonged to Ptolemais. The only evidence of any kind which might lead us to believe in a second deme Ikaria, belonging to Ptolemais, is the *rho* and 'the upper part of a vertical stroke which may be original' of 2362. 53. Ikaria B must at least be considered uncertain.

DAVID M. LEWIS

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(a)



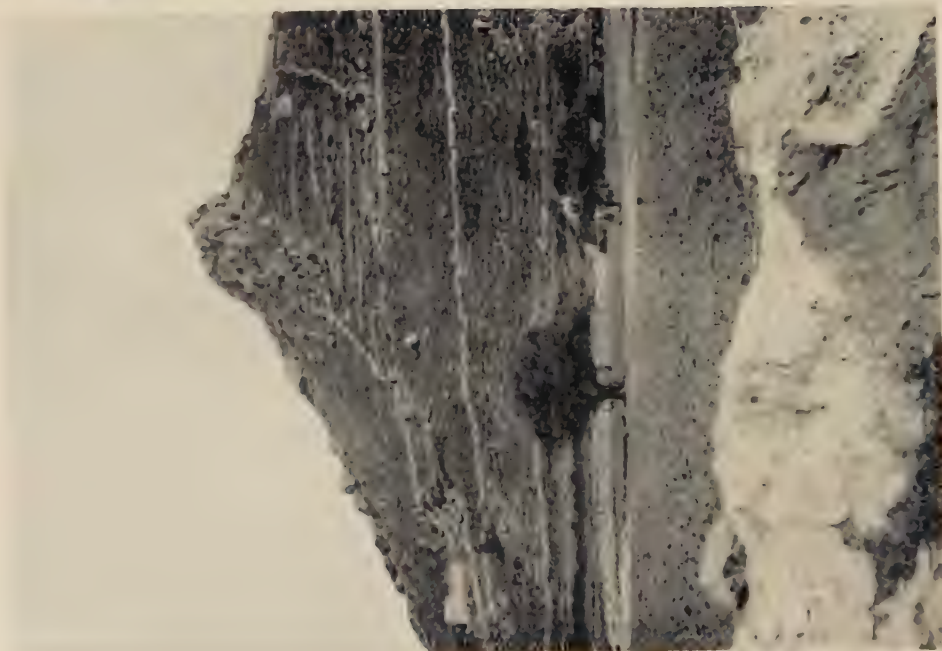
(b)

THE CYCLADES IN THE LATER BRONZE AGE

(a) SITE OF AYIA IRINI IN KEOS. (b) AYIA IRINI, KEOS (FROM THE NORTH).



(b)



(a)



(c)

THE CYCLADES IN THE LATER BRONZE AGE

(a) RIZOKASTELIA IN NAXOS. (b) PART OF FORTIFICATION-WALL AT AKROTIRION OURION, TENOS. (c) LOOP-HANDLED BOWL. AYIA IRINI, KEOS.



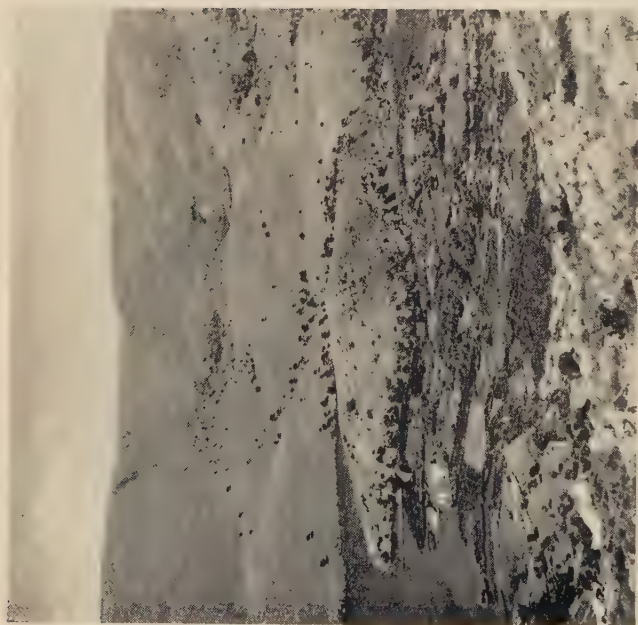
(a)



(b)

DELPHINION IN CHIOS

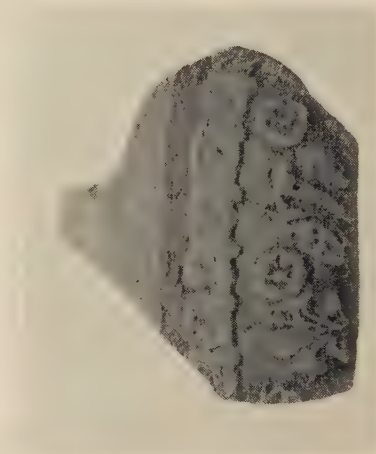
DELPHINION: ACROPOLIS AND VALLEY FROM THE NORTH.



(a)



(c)



(d)



(e)



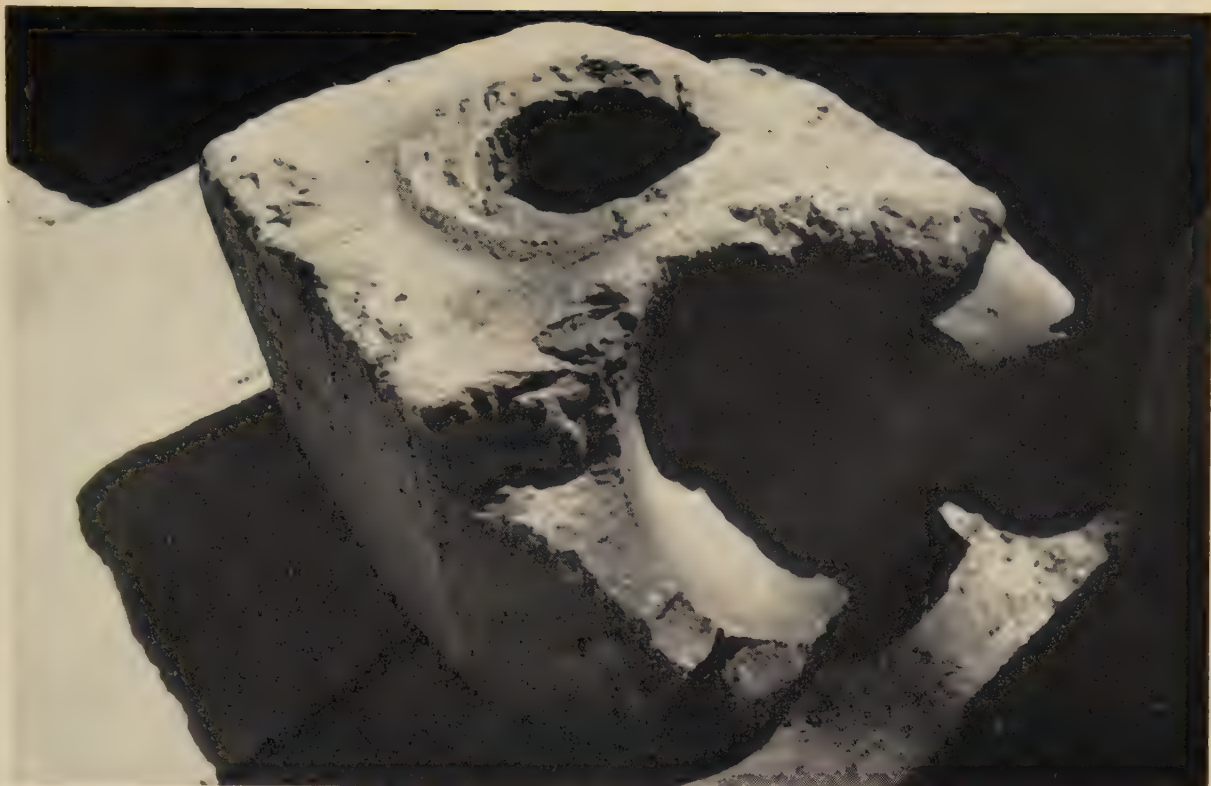
(b)

DELPHINION IN CHIOS

(a) THE ACROPOLIS FROM THE NORTH.

(b) THE HARBOUR FROM THE ACROPOLIS, (c) TOWER A.

(d) FRAGMENT OF BOWL 6. (e) RIM OF BOWL 8.



(a)



(b)

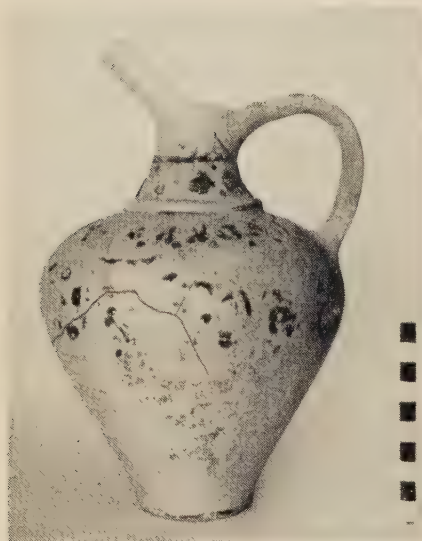
A CHIAN WINE-MEASURE
(a) WINE-MEASURE. (b) INSCRIBED FRONT FACE.



(a)



(b)



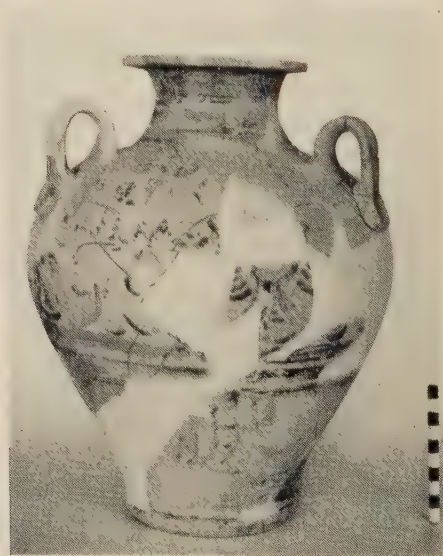
(c)



(e)



(d)



(f)

A L.M. TOMB AT KNOSSOS

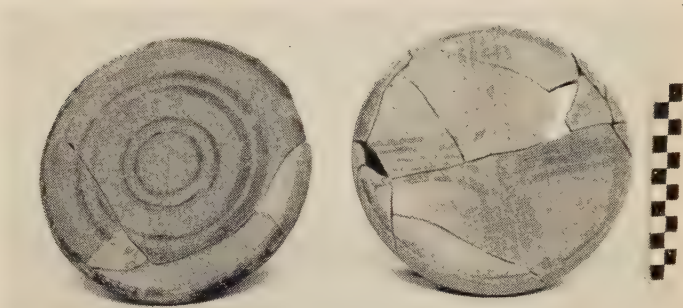
(a) Left to right: VASES 2, 1, 13, 8, 3. (b) KYLIX 1. (c) JUG 5. (d) JUG 4. (e) STRAINER POT 7 AND JUG 3.
 (f) THREE-HANDLED AMPHORA 6.



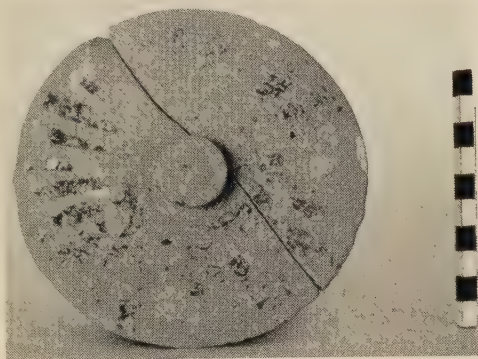
(a)



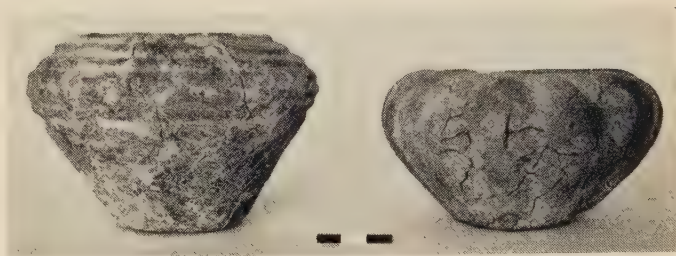
(c)



(d)



(b)



(f)



(e)



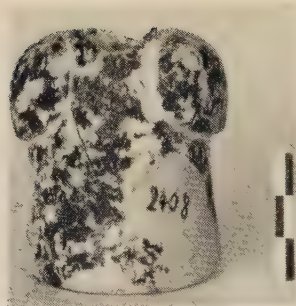
(g)

A L.M. TOMB AT KNOSSOS

(a) TALL ALABASTRON 9. (b) LID 13. (c) Left to right: ALABASTRA 10, 11. (d) Left to right: BASES OF 11, 10.
 (e) ALABASTRON JUG 18. (f) Left to right: STONE BOWLS 19, 20. (g) STONE BOWL 21 AND LID 22.



(a)



(c)



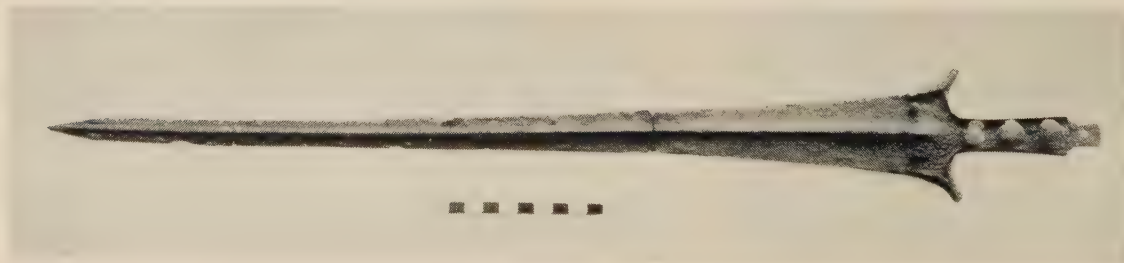
(d)



(b)



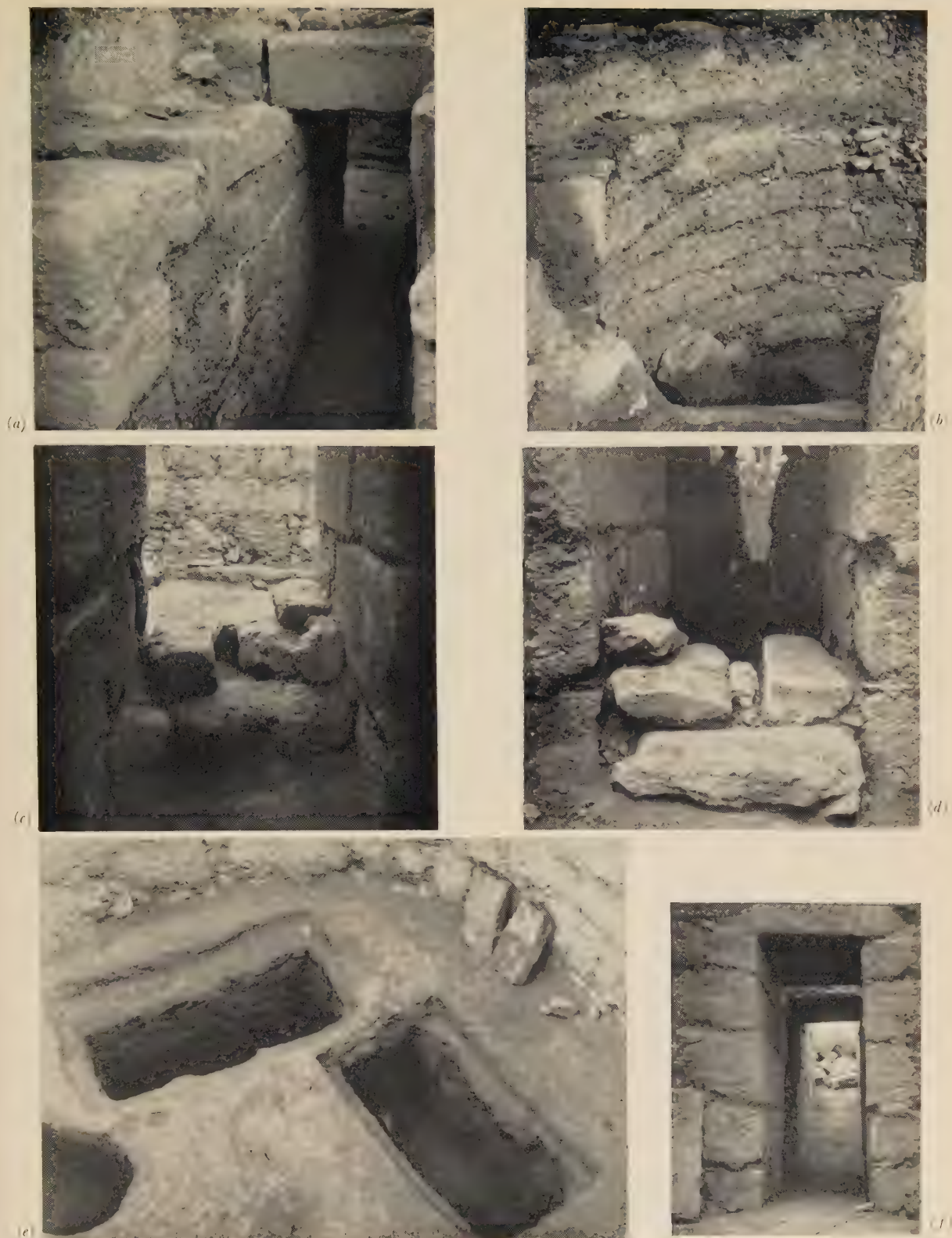
(e)



(f)

A L.M. TOMB AT KNOSSOS

(a, b) SILVER-AND-GOLD CUP 14. (c, d) ANTHROPOMORPHIC VASE 17. (e, f) SWORD 16.



A THOLOS TOMB ON THE KEPHALA

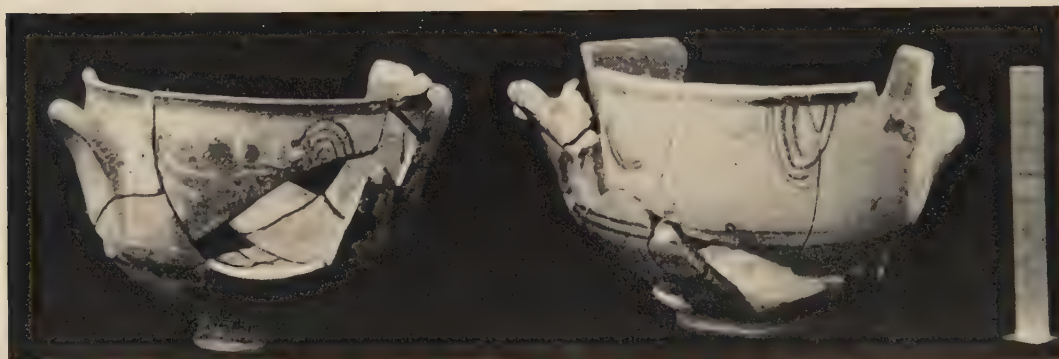
- (a) VIEW DOWN DROMOS TOWARDS ENTRANCE INTO THOLOS CHAMBER. (b) THOLOS CHAMBER FROM ABOVE ENTRANCE.
 (c) BLOCKING WALL OF ENTRANCE FROM DROMOS SIDE. (d) BLOCKING WALL OF ENTRANCE FROM INSIDE THOLOS
 CHAMBER. (e) Left to right: PITS β , δ , γ IN FLOOR OF THOLOS. (f) ENTRANCE FROM INSIDE THOLOS.



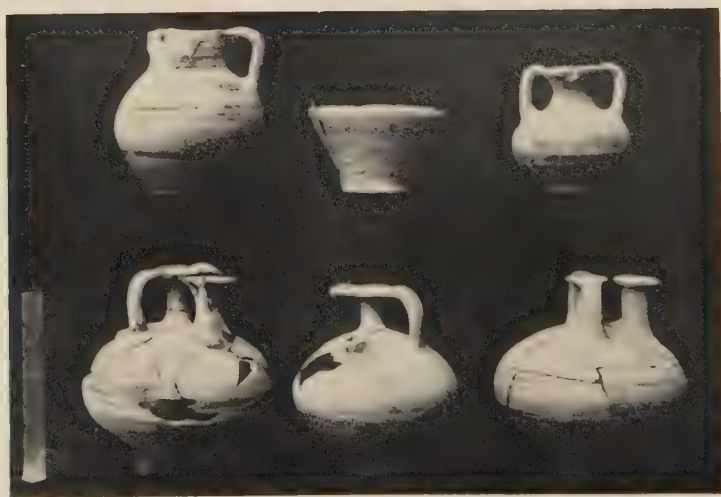
(a)



(b)



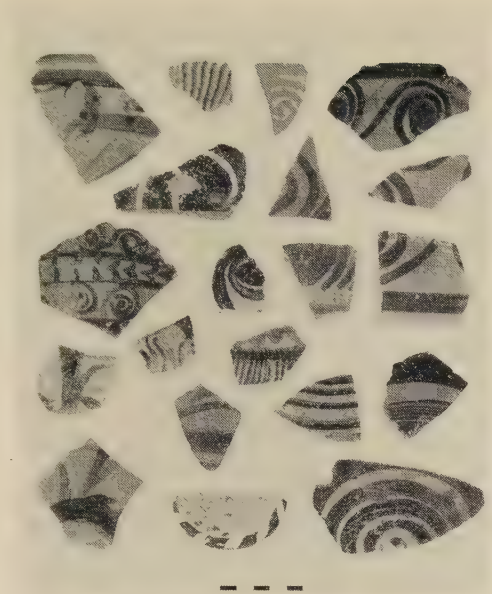
(c)



(d)

A THOLOS TOMB ON THE KEPHALA

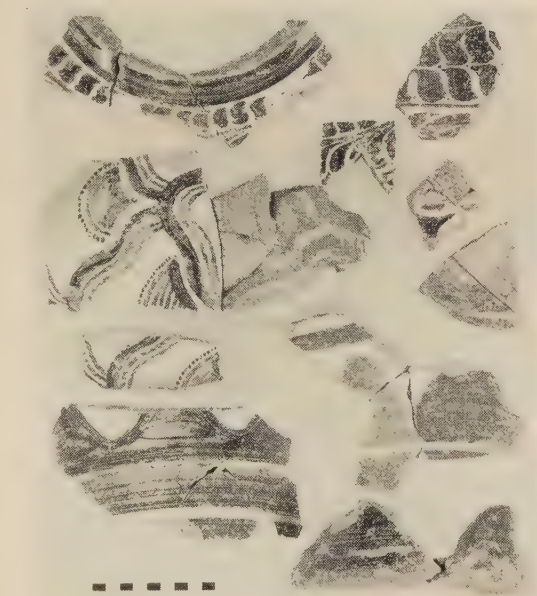
(a) ENTRANCE FROM INSIDE THOLOS. (b) INSCRIPTION ON JAMB OF ENTRANCE. (c) L.M. III VASES FROM THOLOS CHAMBER. (d) L.M. III STIRRUP-VASES, L.M. I CUP, AND PG AMPHORISKOS FROM THOLOS CHAMBER



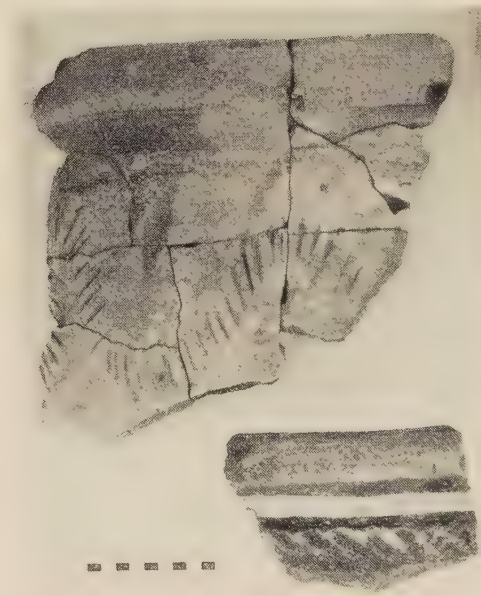
(a)



(b)



(c)



(d)

A THOLOS TOMB ON THE KEPHALA

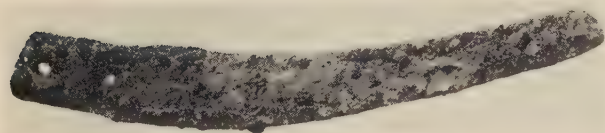
SHERDS FROM THOLOS CHAMBER (p. 11): (a, b) L.M. IA SHERDS. (c) PALACE STYLE AMPHORAE. (d) PITHOS RIMS.



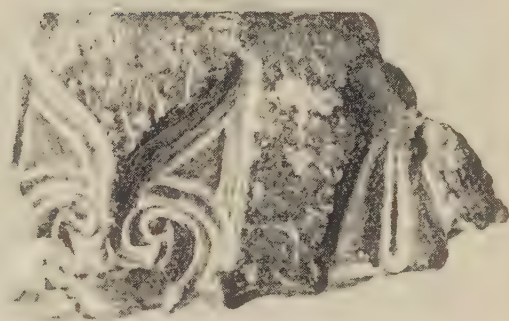
(a)



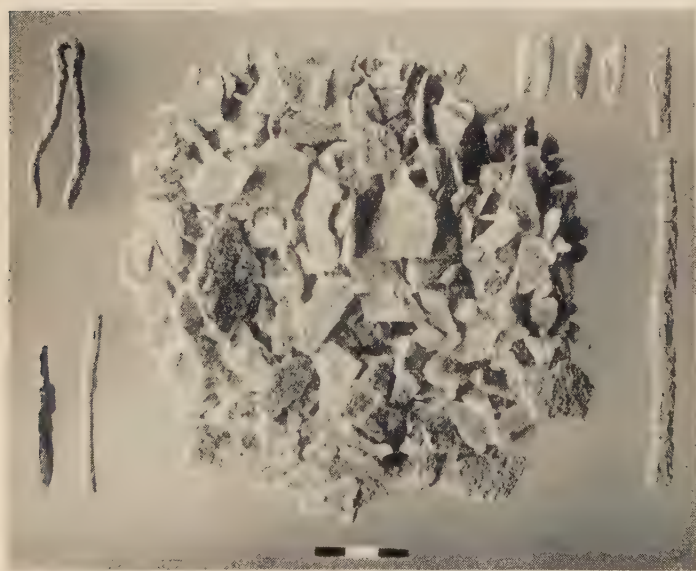
(d)



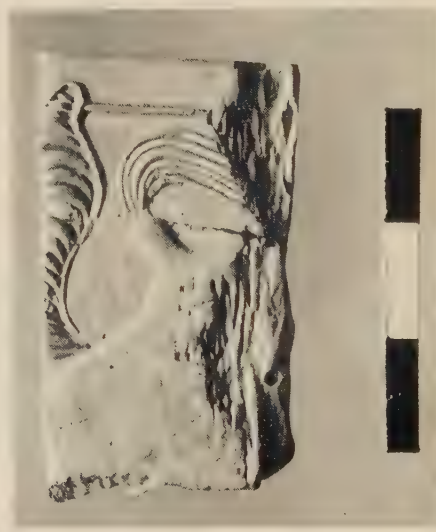
(b)



(e)



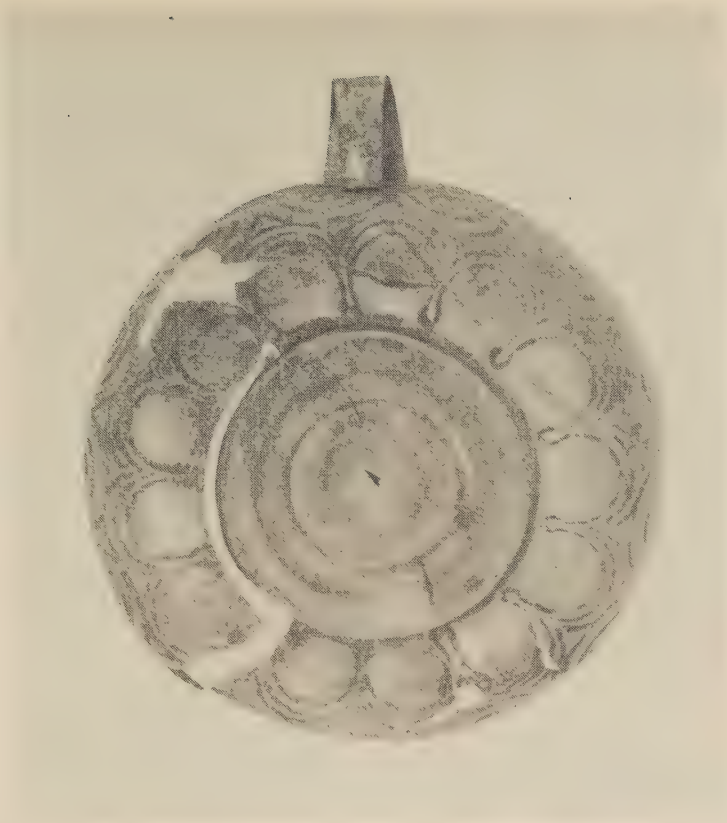
(c)



(f)

A THOLOS TOMB ON THE KEPHALA

(a) GOLD (top row, left to right) RING 2, EARRING 1, ROSETTE 3; (bottom row, left to right) RIVETS 5, ROSETTE 4. (b) BRONZE KNIFE BLADE 6. (c) (Top left) TWEEZERS 7; (bottom left) FRAGMENT 16, PIN 13, (centre) BRONZE PLATE 15; (right) PIN 12. (d) (Top row, left to right) STONE WHORLS, ETC., 27, 24, 25, 26; (bottom row, left to right) FAIENCE BEAD 31, BRONZE RING 10, FAIENCE BEAD 32. (e) STEATITE MOULD 19. (f) IVORY PLAQUE 17.



(a)



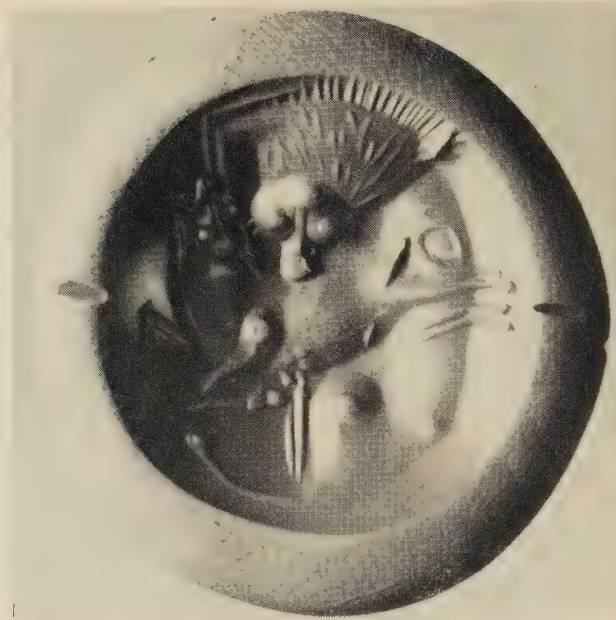
(b)

WARRIOR GRAVE, A. IOANNIS

GOLD CUP I: (a) BASE. (b) SIDE VIEW.



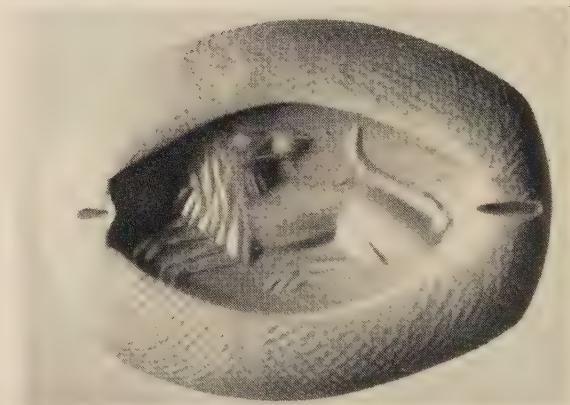
(a)



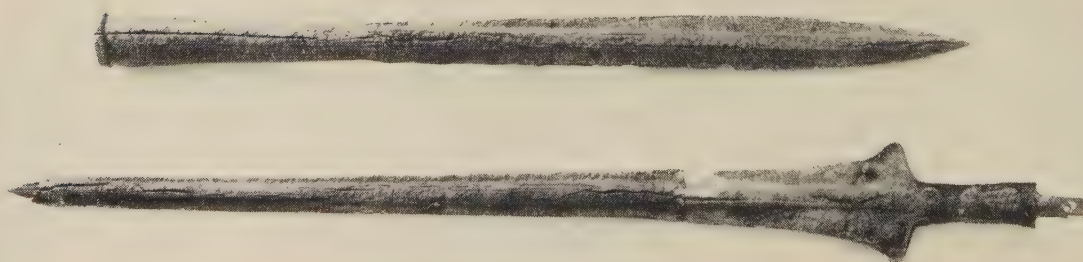
(b)



(c)



(d)



(e)

WARRIOR GRAVE, A. IOANNIS

(a) SEALSTONE 4. (b) IMPRESSION FROM 4. (c) SEALSTONE 3. (d) IMPRESSION FROM 3. (e) SPEARHEAD 8 AND SWORD 5.



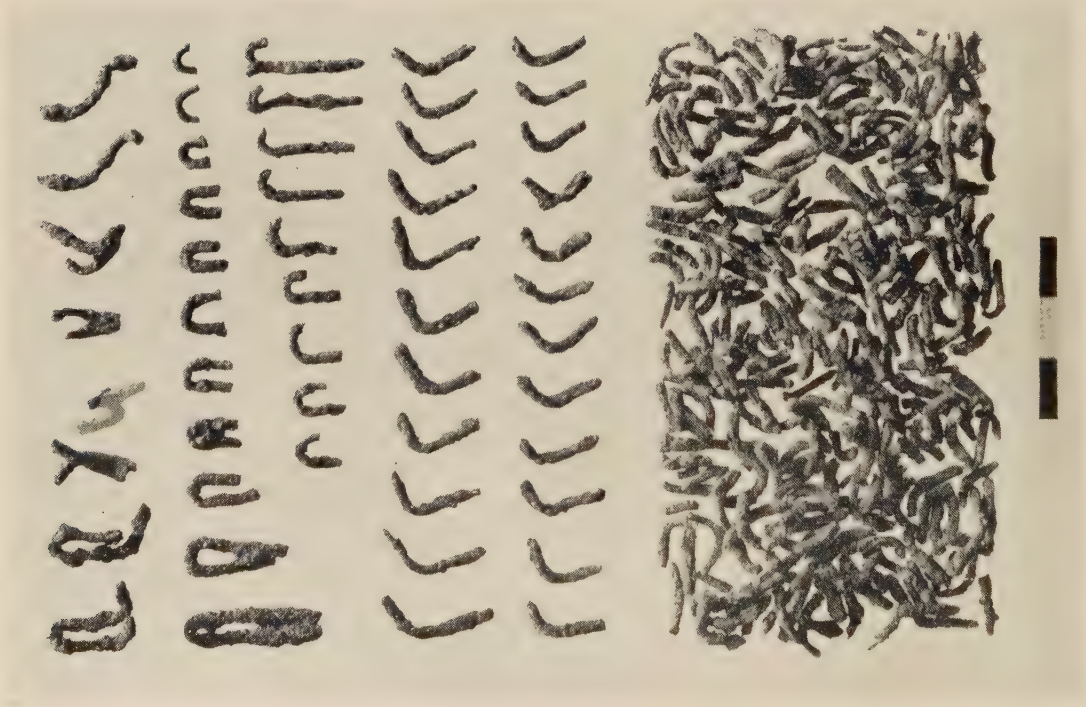
(a)



(b)

WARRIOR GRAVE, A. IOANNIS

(a) BRONZE WEAPONS. *Left to right: SPEARHEADS 9, 10, 12; RAZOR 15; BLADE 14 (below); DAGGERS 7, 6; ARROWHEADS 17, 18, 19 (above), 20 (below), 16.* (b) LAMP 2.

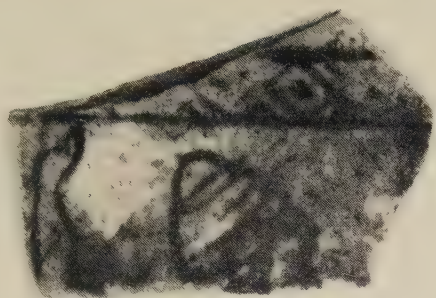


(a)



(b)

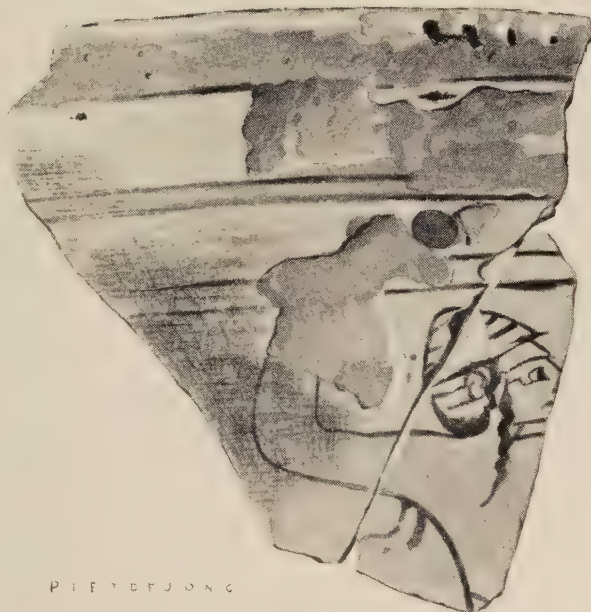
WARRIOR GRAVE, A. IOANNIS
(a) COPPER WIRE 21. (b) Above: CLIPS 22, 24, 25, AND HANDLE 23.



(a)



(b)



PIETRO JONG

(c)

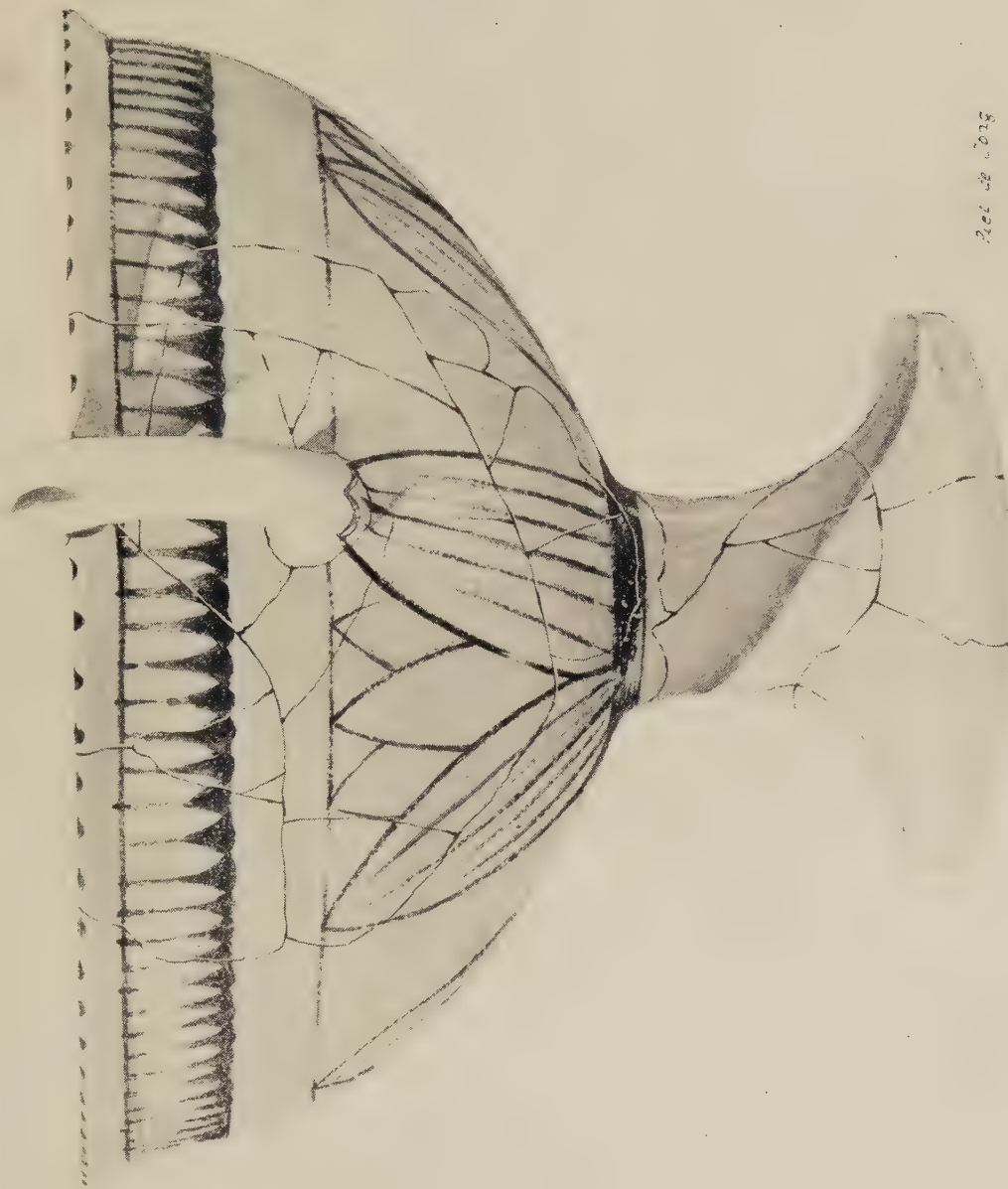
MYCENAE: HOUSE OF SHIELDS

(a) FAIENCE FRAGMENT, WARRIOR. (b) FRAGMENT a (DRAWING). (c) FAIENCE FRAGMENT, WARRIOR (DRAWING).

SCALE 1:1.



MYCENAE: HOUSE OF SHIELDS
FAIENCE BOWL (RESTORED DRAWING). SCALE 1:1.



Rest. by Long

MYCENAE: HOUSE OF SHIELDS
FAIENCE BOWL (RESTORED DRAWING). SCALE 1:1.



MYCENAE · HOUSE OF SHIELDS
FAIENCE RHYTON (RESTORED DRAWING) SCALE 2:3.



(a)



(b)

MYCENAE: HOUSE OF SHIELDS

FAIENCE, POLYCHROME PIECES: (a) HANDLE (DRAWING). SCALE 1:1. (b) LION AND GRIFFIN (DRAWING). SCALE 2:1.



MYCENAE: HOUSE OF SHIELDS
STEATITE RHYTON (RESTORED DRAWING). SCALE 1:1.



(a)



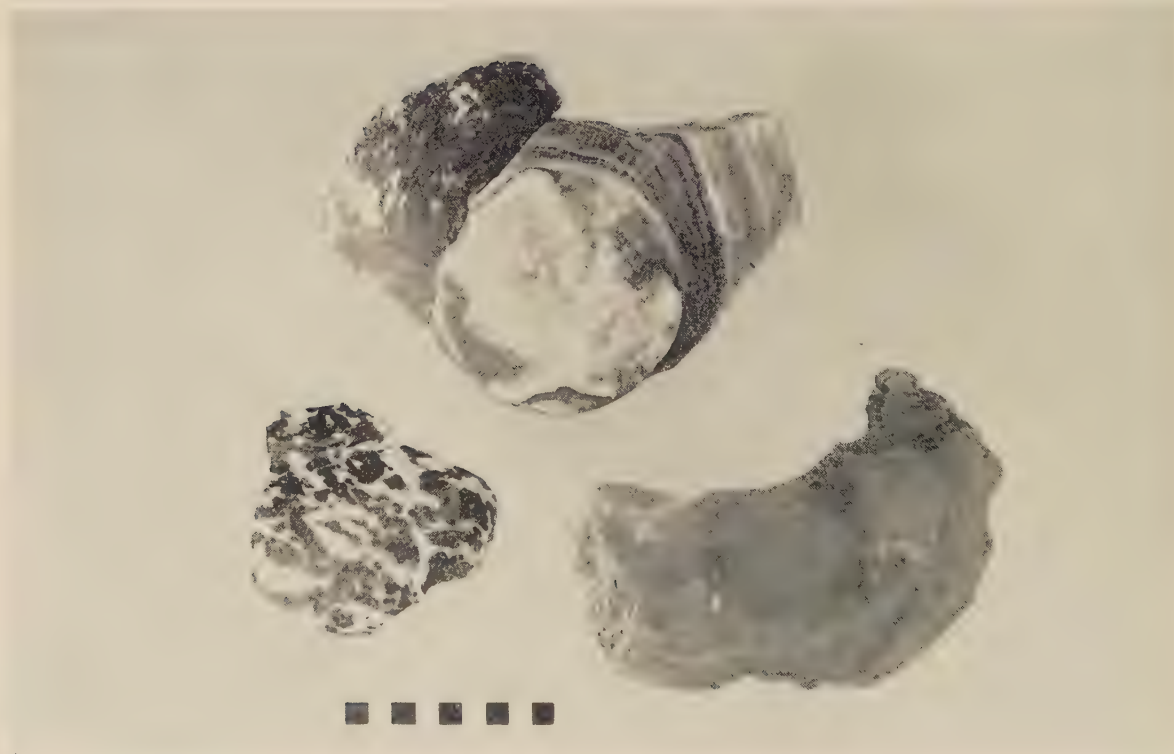
(b)

MYCENAE

HOUSE OF SHIELDS. (a) EAST AND WEST ROOMS FROM NORTH-WEST.
HOUSE OF SPHINXES. (b) GENERAL VIEW FROM SOUTH.



(a)



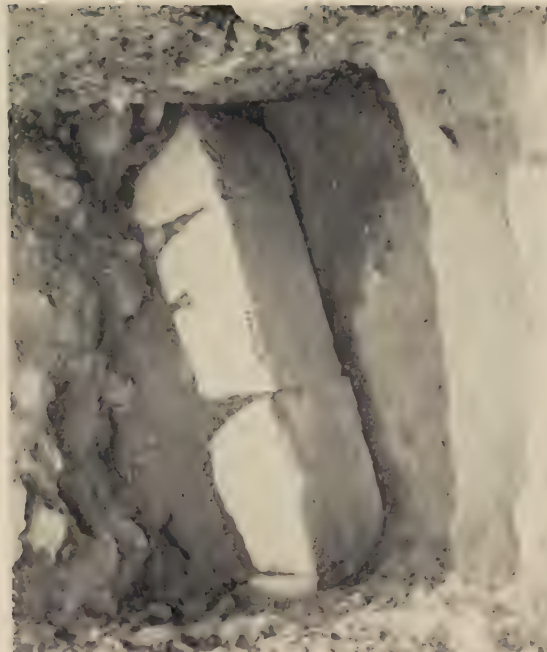
(b)

MYCENAE: HOUSE OF SPHINXES

(a) PESTLE AND MORTAR. (b) FRAGMENTS OF STONE VASES, INCLUDING EGYPTIAN DIORITE BOWL.



(a)



(b)



(c)



(d)

MYCENAE: TREASURY OF ATREUS

(a) POROS BLOCKS 1939, NORTH SIDE. (b) POROS BLOCKS 1939, SOUTH SIDE.
(c, d) WALL FACED WITH POROS 1955, WEST SIDE.



MYCENAE: ATREUS RIDGE
 VASE WITH HORSE (RESTORED DRAWING). SCALE 2:3.



(a)



(b)

MYCENAE: HOUSE OF LEAD

(a) WEST TERRACE FROM NORTH. (b) SOUTH TERRACE.



(a)



(b)



(c)

MYCENAE: HOUSE OF LEAD

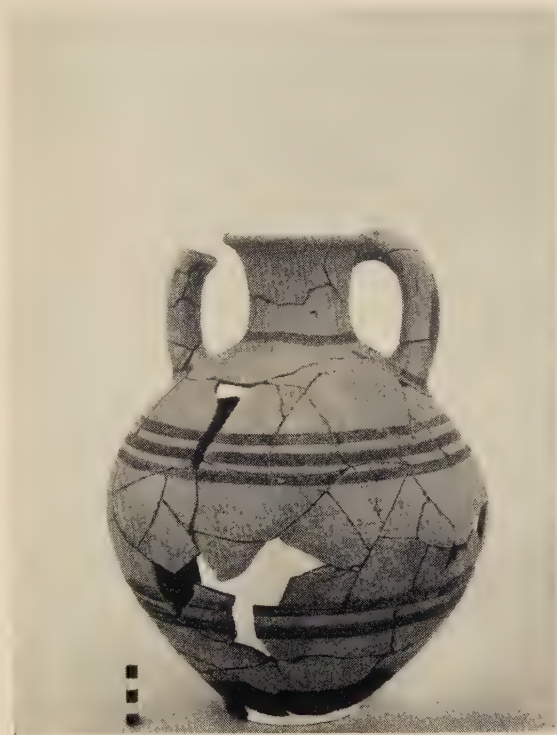
(a) STOREROOM WITH VASES *IN SITU*. (b) METAL INLAY, SILVER AND GOLD. SCALE 1:1.
 (c) METAL INLAY, SILVER AND GOLD (DRAWING). SCALE 2:1.



(a)



(b)



(c)



(d)

MYCENAE: HOUSE OF LEAD

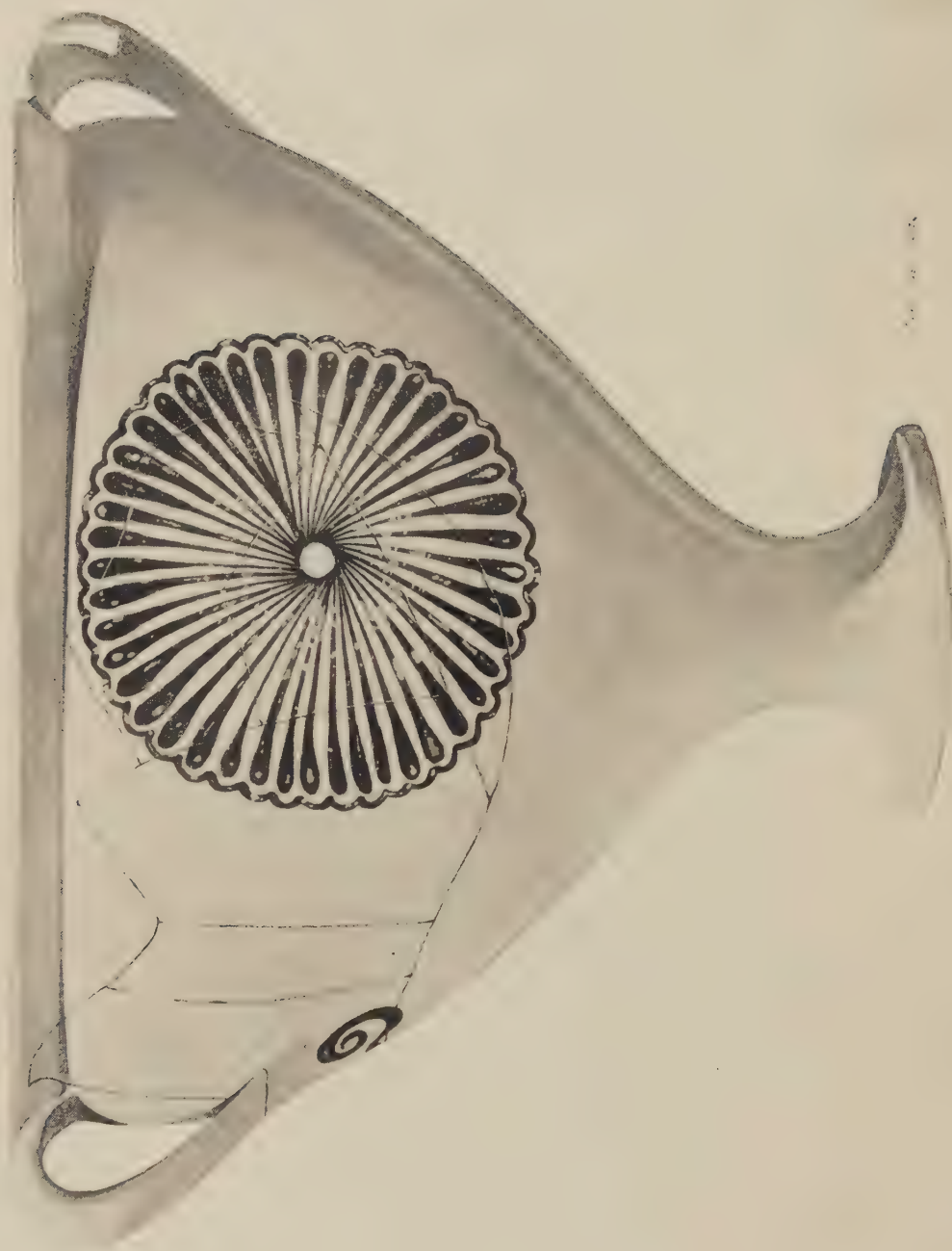
(a) MUG, L.H. IIIA. (b) PIRIFORM JAR FROM STOREROOM, L.H. IIIB. (c) AMPHORA FROM STOREROOM, L.H. IIIB.
(d) STIRRUP JAR FROM STOREROOM, L.H. IIIB.



MYCENAE: HOUSE OF LEAD
MUG, L.H. IIIA (RESTORED DRAWING). SCALE 2:3.



MYCENAE: PREHISTORIC CEMETERY
EPHYRAEAN FRAGMENTS (RESTORED DRAWING). SCALE 2:3.



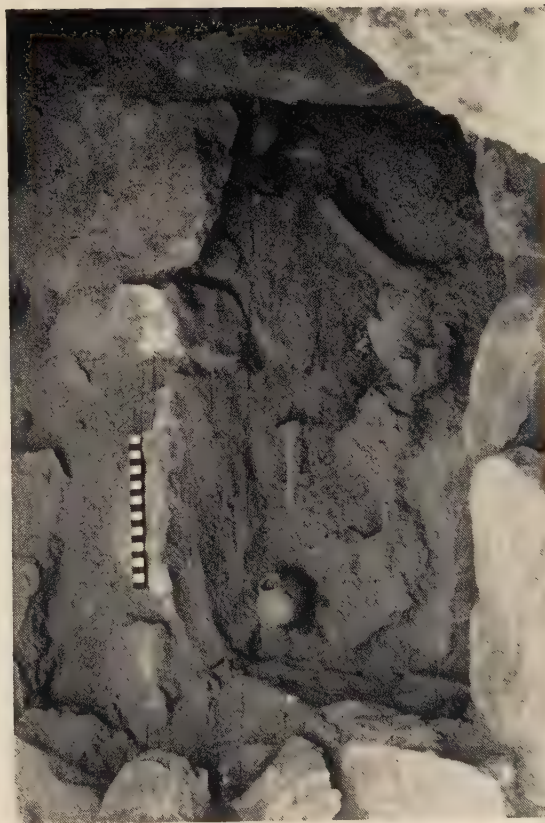
MYCENAE: PREHISTORIC CEMETERY
EPHYRAEAN GOBLET (RESTORED DRAWING). SCALE c. 1:3.



(a)



(b)



(c)



(d)

MYCENAE: TWO TOMBS

(a) G 605 FROM EAST. (b) PG 606. (c) PG 606 OPEN, SHOWING SKELETON AND POT 55-206. (d) 55-9



(a)



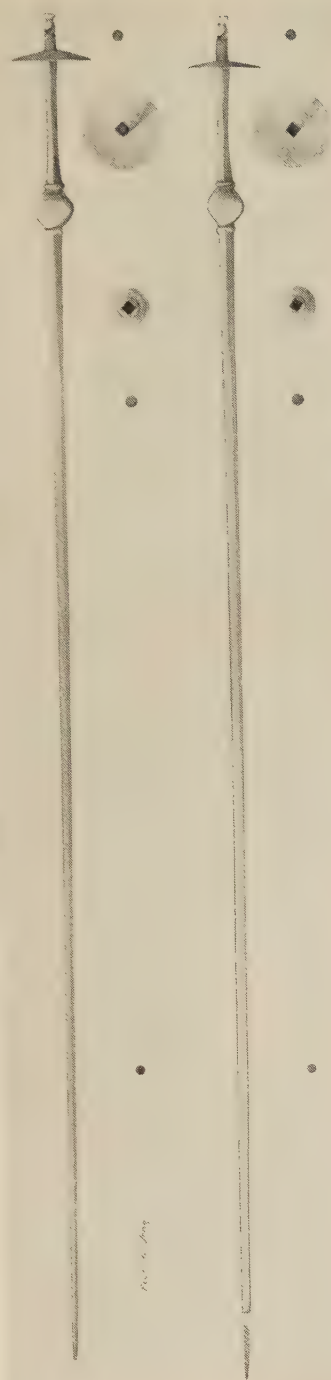
(b)



(c)

MYCENAE: TWO TOMBS

(a) *Left to right:* 55-203, 55-206, 55-202, 55-204. (b) 55-205. (c) 55-207.



(a)



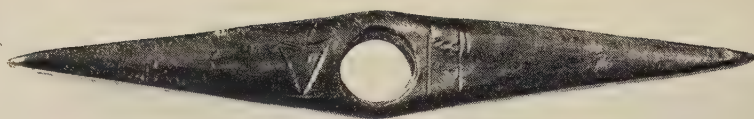
(b)



(c)

MYCENAE: TWO TOMBS

(a) 55-10 (SCALE 1:2). (b) 55-10 (CENTRE). (c) 55-201.



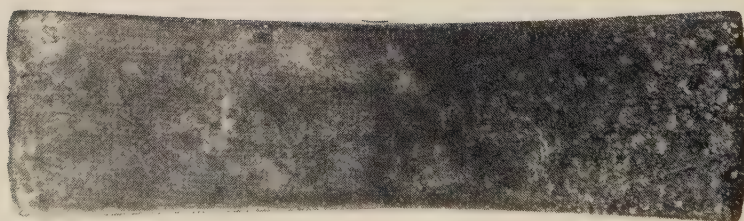
(a)



(b)



(c)



(d)

CRETAN AXE-HEADS WITH LINEAR A INSCRIPTIONS

BRONZE AXE-HEADS: (a-b) FROM CRETE, c. 1:2. (c-d) FROM SELAKONOS, CRETE
(c. c. 1:1, d. c. 1:2).

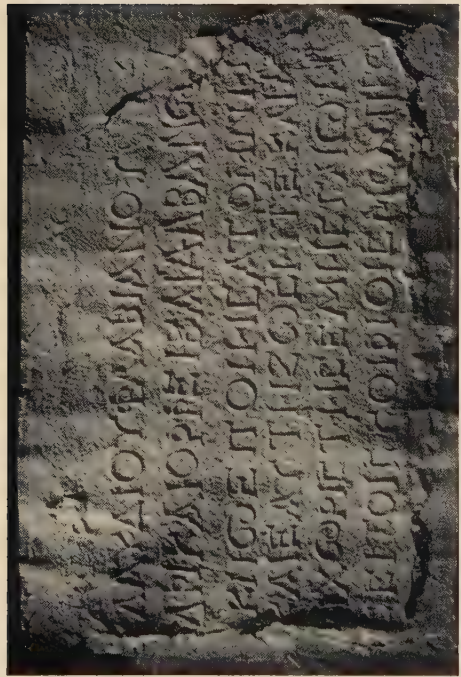


(a)

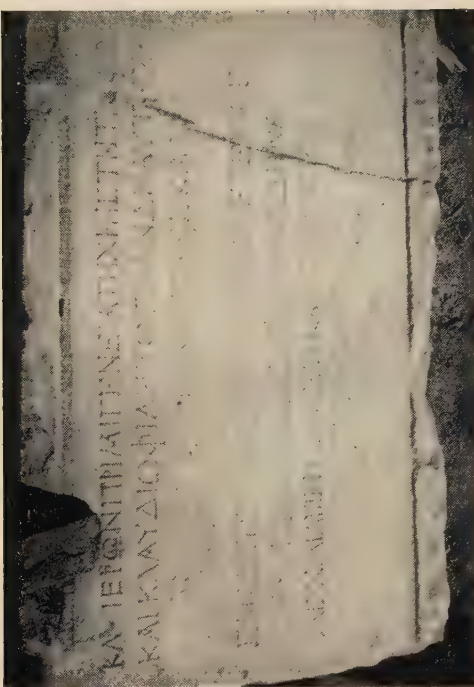


(b)

CRETAN AXE-HEADS WITH LINEAR A INSCRIPTIONS
MINIATURE DOUBLE-AXES FROM ARKALOKHORI: (a) GOLD, (b) SILVER, c. 3:1.



(a)



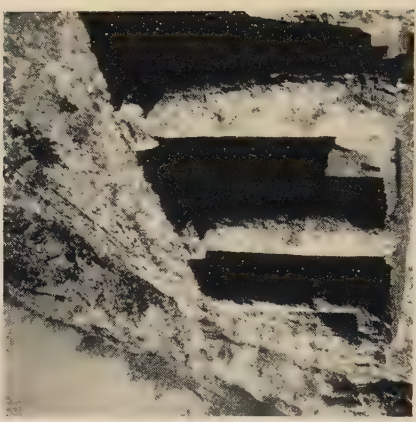
(b)



(c)



(d)



(e)

CIBYRATIS AND CARALITIS
CIBYRA: (a-d) 2, 14, 16, 15. BUBON: (e) ROCK TOMB.



(a)



(b)



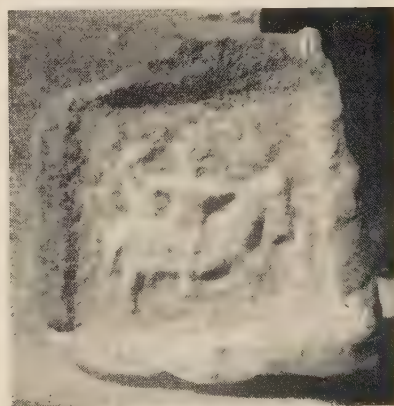
(c)



(e)



(d)



(f)

CIBYRATIS AND CARALITIS

BALBURA: (a) 'THEATRE' ON SOUTH HILL. OENOANDA: (b-d) HELLENISTIC TOWER; ROMAN TERRACE WALL; 22.
 CEYLAN: (e) KALKANTAŞI. ÇAVDIR: (f) KAKASBOS RELIEF.



(a)



(c)



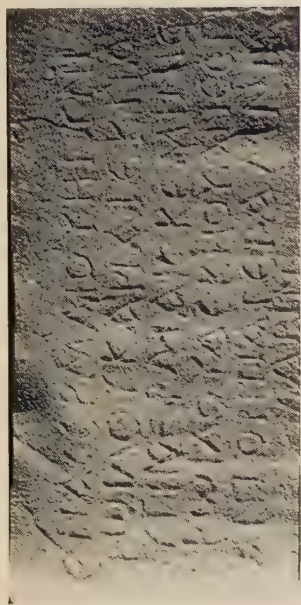
(b)



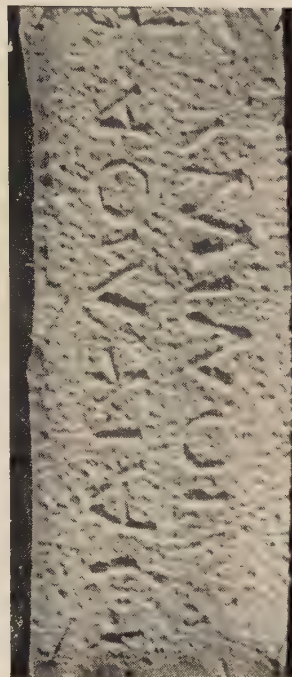
(d)

CIBYRATIS AND CARALITIS

GİRDEV GÖLÜ: (a) Tomb. NEAR UYLUKÖY: (b) Rock Tomb. DENGERE: (c-d) 41.



(a)



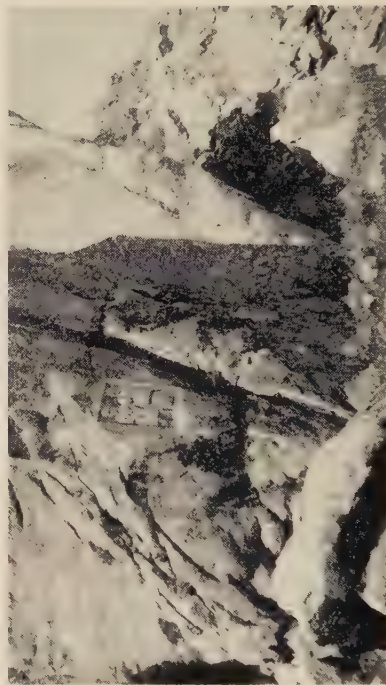
(b)



(c)



(e)



(d)

CIBYRATIS AND CARALITIS

OSMANKALFALAR: (a-b) **46, 48**. MANAY ASARI: (c) RING-WALL. TORIAON: (d e) CLIFF RELIEF, HORSEMAN DEITY IN SANCTUARY.



(a)



(b)



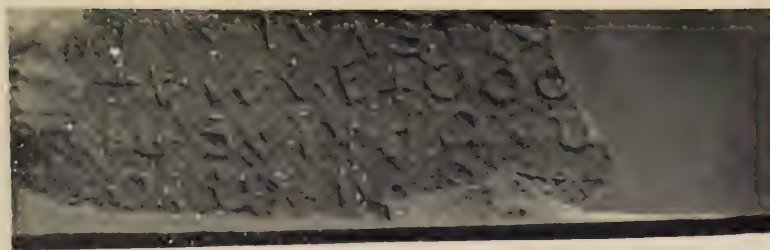
(c)



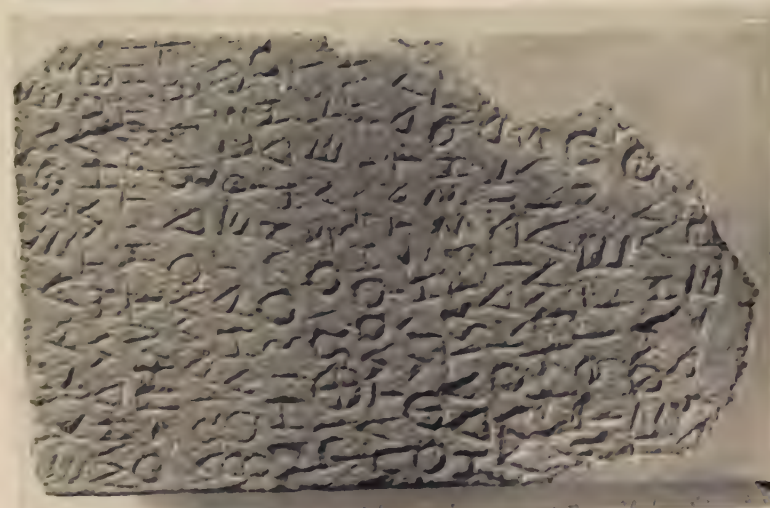
(d)

CIBYRATIS AND CARALITIS

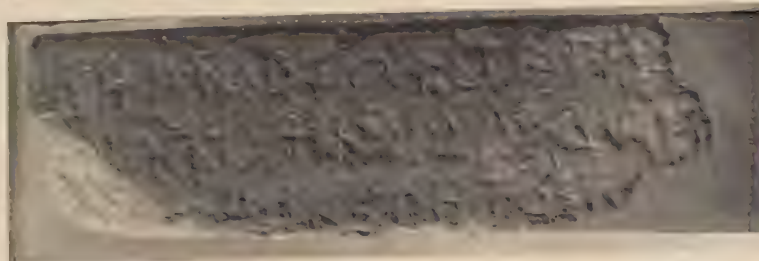
TORTONIAN OF ROCK RIVER, HORSEMAN BUTTE IN SANCTUARY : 59 : 55.



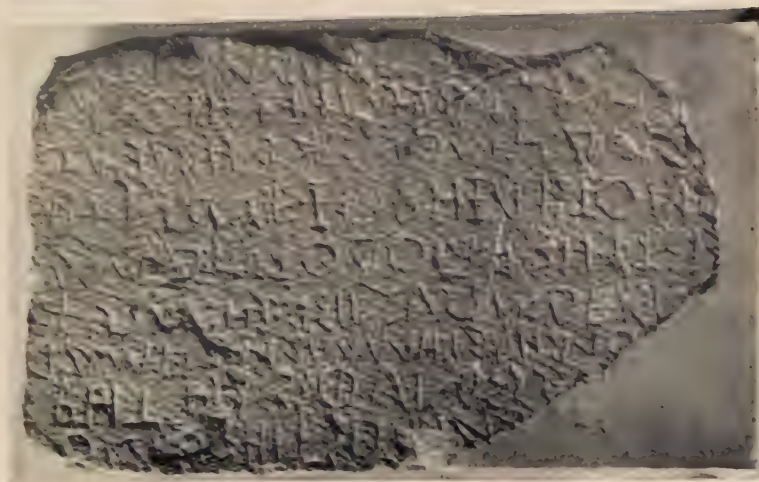
(d)



(c)



(b)



(a)

THE COURTS OF JUSTICE IN ARCHAIC CHIOS
STELE, MUS. ISTANBUL 1907



